

20020307.qrp v02_n487.qrl.20020307

Date: Thu, 7 Mar 2002 19:03:06 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2487

QRP-L Digest 2487

Topics covered in this issue include:

- 1) [121455] Re: PCB etchant
by Dave Fouchey <dafouchey@comcast.net>
- 2) [121456] Re: Pc Boards Got em ! but No Knowledge
by "John J. McDonough" <wb8rcr@arrl.net>
- 3) [121457] Re: Pc Boards Got em ! but No Knowledge
by "ZOOM" <kandrparker@sympatico.ca>
- 4) [121458] More Hidden Antenna Thoughts
by "Mike Duke, K5XU" <k5xu@netdoor.com>
- 5) [121459] Re: Pc Boards Got em ! but No Knowledge
by "ZOOM" <kandrparker@sympatico.ca>
- 6) [121460] Re: PCB etchant
by Pete Burbank <plburbank@kih.net>
- 7) [121461] Re: [Re: OT: 'true RMS' measurement]
by "P.Ermisch" <ermisch@usa.net>
- 8) [121462] Re: 40673's
by Harry Hurst <wa3ptg@comcast.net>
- 9) [121463] Fireball 40 amp - Altoids style, de N4UY
by "John L. \"Jake\" Carter" <jakecart@ix.netcom.com>
- 10) [121464] Arrl Hand Book
by "frank5838" <frank5838@email.msn.com>
- 11) [121465] Cub Fox Log 3/6/02 KB7WW
by Arthur Moe <kb7ww@easystreet.com>
- 12) [121466] Re: Pc Boards Got em ! but No Knowledge
by "Paul Harden, NA5N" <na5n@rt66.com>
- 13) [121467] RE: 'true RMS' measurement
by Nick Kennedy <nkennedy@tcainternet.com>
- 14) [121468] RE: Open Wire Line and Balanced Tuner
by Nick Kennedy <nkennedy@tcainternet.com>
- 15) [121469] Re: More on the 'Miracle Whip'
by Larry Cahoon <lejek@erols.com>
- 16) [121470] The Rogers /Dobbins ARL Folded Conical Helix Antenna paper now published. Revolution in small HF Antenna design!
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 17) [121471] Re: Arrl Hand Book
by "Mike Yetsko" <myetsko@insydesw.com>
- 18) [121472] Ducie update
by "W5TB" <w5tb@arrl.net>

- 19) [121473] Re: Pc Boards Got em ! but No Knowledge
by John Wagner <john@wagner-usa.net>
- 20) [121474] #99 today :)
by "George Osier" <gosier@twcny.rr.com>
- 21) [121475] RE: Pc Boards Got em ! but No Knowledge
by "Doug Hendricks" <ki6ds@dospalos.org>
- 22) [121476] NEQRP CW Net, 7 March 02, 8:30 EST, 3.565 MHz
by Chuck Ludinsky <cjl@mitre.org>
- 23) [121477] Re: Ducie Island
by Bruce Rattray <rattray@gpfn.sk.ca>
- 24) [121478] Re: Arrl Hand Book
by "V Cortina" <vcortina@hvc.rr.com>
- 25) [121479] Re: [TenTec] The Rogers /Dobbins ARL Folded Conical Helix Antenna
paper
now published. Revolution in small HF Antenna design!
by "George, W5YR" <w5yr@att.net>
- 26) [121480] Re: Open Wire Line and Balanced Tuner
by "George, W5YR" <w5yr@att.net>
- 27) [121481] Re: Pc Boards Got em ! but No Knowledge
by "John J. McDonough" <wb8rcr@arrl.net>
- 28) [121482] Wilderness alert
by "Robert Armstrong" <barmstrong@sisna.com>
- 29) [121483] RE: Open Wire Line and Balanced Tuner
by Nick Kennedy <nkennedy@tcainternet.com>
- 30) [121484] Antennas & More?
by Lourette <lourette@localnet.com>
- 31) [121485] Re: Pc Boards Got em ! but No Knowledge
by "Mark J. Dulcey" <mark@buttery.org>
- 32) [121486] FS: Shurr paddle
by "SAAD MAHAINI" <N5FF@attbi.com>
- 33) [121487] Re: Open Wire Line and Balanced Tuner
by "George, W5YR" <w5yr@att.net>
- 34) [121488] Re: [GQRP] Note from Miracle Antenna...
by K5BDZ@aol.com
- 35) [121489] Delaware
by Joseph Mikuckis <k3chp@erols.com>
- 36) [121490] Re: Pc Boards Got em ! but No Knowledge
by David Hinerman <WD8CIV@worldnet.att.net>
- 37) [121491] Re: Pc Boards Got em ! but No Knowledge
by Bruce Muscolino <w6toy@erols.com>
- 38) [121492] Re: More on the 'Miracle Whip'
by Bruce Muscolino <w6toy@erols.com>
- 39) [121493] Re: Pc Boards Got em ! but No Knowledge
by Bruce Muscolino <w6toy@erols.com>
- 40) [121494] Dipoles, Windoms, Loops, oh my!
by "Jason Hissong" <jhissong1@columbus.rr.com>
- 41) [121495] Re: Pc Boards Got em ! but No Knowledge
by <igeq100@iupui.edu>

- 42) [121496] F.S. Argonaut II
by W1R0@aol.com
- 43) [121497] Re: More Hidden Antenna Thoughts
by Bruce Muscolino <w6toy@erols.com>
- 44) [121498] Re: [GQRP] Note from Miracle Antenna...
by George Gingell <k3tks@u1.abs.net>
- 45) [121499] QRP+ version number
by "Hartwell, Martin E, ALINF" <mehartwell@att.com>
- 46) [121500] FS: Warbler, Notebook...
by Joe Wittmer <joe@wittmer.com>
- 47) [121501] Re: Pc Boards Got em ! but No Knowledge
by "Paul Harden, NA5N" <na5n@rt66.com>
- 48) [121502] Re: PCB etchant
by "Brad Hernlem" <alihernlem@hotmail.com>
- 49) [121503] Re: Ten Tec 505, 509, 515
by "Randy Randall" <randallr@Healthall.com>
- 50) [121504] Re: More Hidden Antenna Thoughts
by "DIANNE M WISE" <roy537@prodigy.net>
- 51) [121505] Re: Pc Boards Got em ! but No Knowledge
by "Dave Fifield" <dave@redhotradio.com>
- 52) [121506] FS Vertical Antenna
by "wd7y@pyramid.net" <wd7y@pyramid.net>
- 53) [121507] Re: Pc Boards Got em ! but No Knowledge
by Bruce Muscolino <w6toy@erols.com>
- 54) [121508] Re: PCB etchant
by David Hinerman <WD8CIV@worldnet.att.net>
- 55) [121509] Harbor Freight Hand Punch
by Chuck Adams <k7qo@earthlink.net>
- 56) [121510] Re: Pc Boards Got em ! but No Knowledge
by Bruce Muscolino <w6toy@erols.com>
- 57) [121511] FS QRP , info on old QQ's etc.
by N4SKS@cs.com
- 58) [121512] RE: Keyer question - Slow Vs Fast Keying - comment
by Bill Coleman <aa4lr@arrl.net>
- 59) [121513] RE: Keyer question - Slow Vs Fast Keying - comment
by Bill Coleman <aa4lr@arrl.net>
- 60) [121514] Truffle Hunt Tonight: Be there or be square!
by Paul Womble <pwomble1@tampabay.rr.com>
- 61) [121515] qrp tuner design with audible indication
by "McCloskey, Anthony" <AMcCloskey@mail.intracorp.com>
- 62) [121516] QRP and Project mags
by "Tracy Markham" <tracy@bytemark.com>
- 63) [121517] Results of the MARCH SPARTAN SPRINT
by Russ Carpenter <russ@natworld.com>
- 64) [121518] Re: Pc Boards Got em ! but No Knowledge
by Steven Weber <kd1jv@moose.ncia.net>
- 65) [121519] pcb programs
by "carl seyersdahl" <carlseye@tampabay.rr.com>

- 66) [121520] Johnson KW Matchbox
by "George, W5YR" <w5yr@att.net>
- 67) [121521] Re: pcb programs
by "ZOOM" <kandrparker@sympatico.ca>
- 68) [121522] Re: [fpqrp] Truffle 3/5/2002
by k8cz@att.net
- 69) [121523] Re: pcb programs
by Steven Weber <kd1jv@moose.ncia.net>
- 70) [121524] MORE FS , es whats gone
by N4SKS@cs.com
- 71) [121525] sri RE; whats gone
by N4SKS@cs.com
- 72) [121526] portable vertical antenna
by "John Dorson" <jdorson@Worldshare.net>
- 73) [121527] The TDA1072 Story
by nilsbull@juno.com
- 74) [121528] Re: More on the 'Miracle Whip'
by Larry Cahoon <lejek@erols.com>
- 75) [121529] RE: Dipoles, Windoms, Loops, oh my!
by "Fancher, Mark (GEAE)" <Mark.Fancher@ae.ge.com>
- 76) [121530] Re: Harbor Freight Hand Punch
by <winjones@ix.netcom.com>
- 77) [121531] Re: Ten Tec 505, 509, 515
by <winjones@ix.netcom.com>
- 78) [121532] RE: Harbor Freight Hand Punch
by "Ed Tanton" <n4xy@earthlink.net>
- 79) [121533] RE: Harbor Freight Hand Punch
by Mark Schoonover <schoon@amgt.com>
- 80) [121534] Re: [WCARC] The Rogers /Dobbins ARL Folded Conical Helix Antenna
paper now published. Revolution in small HF Antenna design!
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 81) [121535] Re: Pc Boards Got em ! but No Knowledge
by "John J. McDonough" <wb8rcr@arrl.net>
- 82) [121536] pcbs
by "carl seyersdahl" <carlseye@tampabay.rr.com>
- 83) [121537] Re: pcb programs
by "Trevor Jacobs" <fxtech@earthlink.net>
- 84) [121538] [CONTEST] N2CQ QRP Contest Calendar Mar 3-31
by Ken Newman <N2CQ@dandy.net>
- 85) [121539] qrp freqs needed
by Gary Lee <kb9zuv@arrl.net>
- 86) [121540] Subject: portable vertical antenna
by John R Kirby <n3aaz-qrp@juno.com>
- 87) [121541] SCORE!!
by "N8IE" <n8ie@woh.rr.com>
- 88) [121542] Re: QRP+ version number//QRP+ Experimentation.
by ve3ab@mail.mondenet.com
- 89) [121543] Re: Dipoles, Windoms, Loops, oh my!

by Dave Richards <wr3i@earthlink.net>
90) [121544] Re: Dipoles, Windoms, Loops, oh my!
by Dave Richards <wr3i@earthlink.net>
91) [121545] 7X4AN on 5 watts
by Fred Lesnick <flesnick@tbaytel.net>

Date: Wed, 06 Mar 2002 18:49:02 -0500
From: Dave Fouchey <dafouchey@comcast.net>
To: alihernlem@hotmail.com,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [121455] Re: PCB etchant
Message-ID: <4.1.20020306184823.009f2870@localhost>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT

So would a common 20D nail do for the electrode then?

Dave
WA4EMR

At 08:35 PM 3/6/2002 +0000, Brad Hernlem wrote:

>OK, let's see ...

>

>You probably have the following cathode reaction:

>

>Cu++ + 2e- ----> Cu

>

>and also some:

>

>2H+ + 2e- ----> H2

>

>and at the anode:

>

>4OH- ----> O2 + 2H2O + 4e-

>

>Now, because some of the cathode electrons will go to reducing copper ions
>to copper metal (removing it from solution) there will be less than
>stoichiometric removal of H+ than the OH- removed at the anode. This means
>that the pH will go down (more acidic). You will NOT, however, be
>replenishing any Fe+++ except perhaps from what iron may still be available
>in solution as Fe++ (that oxidation would be taking place at the anode but
>the reduction reaction could also take place at the cathode ... net result,
>nothing).

>

>Might be better to use an iron anode.

>
>Brad
>
>
>Pete Burbank (plburbank@kih.net) writes:
>-----
>----
>
>I'm not a chemist but do enjoy experimenting. I thought the ferric chloride
>could be
>reclaimed by reversing the process so after etching a couple boards I put
>the solution
>in a plastic container, connected a (12v) one Amp trickle battery charger
>to 2 carbon rods
>and ran a current through the solution for a few hours. One carbon rod had
>a glob of copper
>on it at the end of the experiment. No way to weigh it but it looked like
>about
>the same amount that was etched off the boards. The ferric chloride was
>quite
>vigorous when I inserted a test piece of scrap PCB.
>In terms of measurement it was truly an amateur experiment but it is better
>than
>dumping the etchant. My etchant is back in the bottle and ready for making
>another board.
>This is the sort of experiment that is best conducted outdoors on a warm
>day. :-)
>Perhaps others have tried this and I'm open to any comments.
>73
>Pete NV4V
>
>
>
>
>
>-----
>Send and receive Hotmail on your mobile device: <http://mobile.msn.com>

Date: Wed, 6 Mar 2002 19:10:55 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [121456] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <008101c1c56c\$8e5d3ee0\$010044c0@chartermi.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

----- Original Message -----

From: "John Wagner" <john@wagner-usa.net>

Subject: Re: Pc Boards Got em ! but No Knowledge

> Why would a hobbyist like myself want to etch a board?

Most times, Manhattan construction is just fine. When you have a project that is mostly IC's with little or no RF, perfboard is just fine. But when you have a combination of a lot of ICs with a significant RF component, then either has it's issues. Ditto when you have a lot of repetitive wiring, like in an LED display of multiple digits.

However, the thing that really drove me to get interested was those bloody TSSOP packages. Discrete SM parts, at least in the larger flavors, are quite compatible with Manhattan, and make for a much stronger result than the leaded parts. Even SOTs, at least in the smaller pin counts, are manageable. But lots of really nice parts are only available in TSSOP and I haven't found a way to make that workable with Manhattan.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

Date: Wed, 6 Mar 2002 19:14:56 -0500

From: "ZOOM" <kandrparker@sympatico.ca>

To: <john@wagner-usa.net>,

"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [121457] Re: Pc Boards Got em ! but No Knowledge

Message-ID: <00cf01c1c56d\$2b0d8ce0\$99a4fea9@robertpa>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Because some of us design and some of us build prefab kits!

----- Original Message -----

From: John Wagner <john@wagner-usa.net>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Sent: Wednesday, March 06, 2002 5:23 PM

Subject: Re: Pc Boards Got em ! but No Knowledge

> Gang,
>
> This may seem like a dumb question, but...
>
> Why would a hobbyist like myself want to etch a board?
>
> I started building with kits (and prefab boards) and moved on to Manhattan
> style building. It seems to me that Manhattan style removes the need to;
>
> 1. Learn new and possibly frustrating software programs.
> 2. Avoid messy (possibly dangerous?) chemicals.
>
> And it:
>
> 1. Speeds construction.
> 2. Promotes experimenting.
> 3. Makes it easier to troubleshoot.
>
> So why would someone who isn't designing a production run of a kit/product
> bother?
>
> 73,
>
> John, N1QO
>
> >
> > YES YES YES
> > A valid point ;0)
> > Anyway the instructions for deluting the HCL is marked on the bottle so
> > follow that and you'll be safe I hope.
> >
> >
> >
> > ----- Original Message -----
> > From: John J. McDonough <wb8rcr@arrl.net>
> > To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
> > Sent: Wednesday, March 06, 2002 4:53 PM
> > Subject: Re: Pc Boards Got em ! but No Knowledge
> >
> >
> >> NO NO NO!
> >>
> >> ----- Original Message -----
> >> From: "ZOOM" <kandrparker@sympatico.ca>
> >> Subject: Re: Pc Boards Got em ! but No Knowledge
> >>
> >>

> >>> 30% HCL can be bought at most hardware stores. Just add water to
bring
> >> the
> >>> concetration down to near 10%.
> >>
> >> Don't you remember your high school chemistry? Never add water to
acid.
> >> OK, OK, probably HCl isn't going to exotherm very badly, especially at
> > 30%,
> >> but as a matter of practice, add your acid to water.
> >>
> >> Why you ask? When you mix water and acid, there is substantial heat
> >> liberated. If you add the water to acid, the acid can boil,
splattering
> > you
> >> with acid. Generally, not a good thing. If you add acid to water,
it's
> >> quite dilute to start, so probably won't liberate enough heat to boil
> >> anything, but even if you are reckless enough to add it too fast, what
you
> >> are going to get sprayed with is mostly water.
> >>
> >> Now to tell you the truth, I don't think this is much of a problem with
> >> hydrochloric, it's a big deal with sulfuric. And it's obviously less
of a
> >> problem with dilute acids, I've never known vinegar to boil when I add
> >> water. Nevertheless, always make it a habit to add the acid to water
> > rather
> >> than the other way around, and do it slowly.
> >>
> >> 72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
> >> didileydadidah QRP-L #1446 Code Warriors #35
> >>
> >
> >
>

Date: Wed, 6 Mar 2002 18:21:14 -0600
From: "Mike Duke, K5XU" <k5xu@netdoor.com>
To: <qrp-l@lehigh.edu>
Subject: [121458] More Hidden Antenna Thoughts
Message-ID: <032b01c1c56e\$188aab60\$2cd294d0@k5xu>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

"Terrorist preparedness" is to me, if anything, a good reason to maintain a "radio to go" system.

If you remember the Falkland Islands war, you may also remember the story of the amateur who transported his Atlas 210X and a 15 meter dipole from house to house in order to maintain contact with England until the troops could arrive to protect the islands.

When operating with a hidden antenna, you must use good sense, be ready to really hide it by removing it quickly, and expect to encounter people who (especially if they do not have the authority to do so) will attempt to bully you into removing it.

I have operated with attic, or low-profile outdoor wires for 20 years, and am convinced that qrp beats the heck out of qrt any day.

Only once thus far have I had to call someone's bluff. Once a down-stairs neighbor who had a reputation of making trouble for everyone else in the building called the local cable company to my house to order me to "stop using that CB radio."

I took the gentleman's name, then called his boss and the cable engineer. The result was that the company spent three days in my complex, removed a dozen or so improper installations, and really cleaned up the system.

Of course, whenever the neighbor's TV lost the signal any time after that, whether I was home or not, we played tattletales with the cable company.

I also knew what she didn't. This was the early 90's during the "do nothing" days of the FCC before Mr. Hollingsworth. So, whenever she threatened to call the FCC, I simply gave her the number for the New Orleans office. That would really send her up the wall!

When I finally moved from that complex, she had great fun telling everyone that she had me evicted. I figured that since I had enjoyed my hobby despite her, she was entitled to a little fun of her own.

Date: Wed, 6 Mar 2002 19:20:57 -0500

From: "ZOOM" <kandrparker@sympatico.ca>

To: <john@wagner-usa.net>,

"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [121459] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <00e901c1c56d\$f3eeb8a0\$99a4fea9@robertpa>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well John if the pads are lifting then your were soldering incorrectly.
1. Using too much heat when soldering or
2. Keeping the soldering iron on too long
If you use proper soldering techniques, the pad will never lift. Especially
from the excellent boards provided for the Elecraft gear.

Regards,
Robert
VE3RPF

----- Original Message -----
From: John Wagner <john@wagner-usa.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Wednesday, March 06, 2002 6:15 PM
Subject: Re: Pc Boards Got em ! but No Knowledge

> I have to disagree with you about Manhattan style not being as robust a
> method of construction. Well, not completely, I will concede that it's
> probably not AS robust as a PC board - but - it's not weak by any means. I
> have had pads come up, but as long as everything is soldered together it's
> not a problem. I've also had the copper foil lift off, but again, as long
as
> it's all soldered together the circuit works fine.
>
> On the opposite side of the coin, when I built my K-1 one of the channels
> under the crystal came loose and the through-hole connection was iffy,
which
> caused the radio not to function correctly. I ended up having to send the
> radio in to be fixed as I couldn't figure out the problem (it looked
fine!).
>
> 73,
>
> John, N1QQ
>
> > From: Bruce Muscolino <w6toy@erols.com>
> > Reply-To: w6toy@erols.com
> > Date: Wed, 06 Mar 2002 17:47:17 -0500
> > To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
> > Subject: Re: Pc Boards Got em ! but No Knowledge

> >
> > John,
> >
> > Building on a PC board is one cut above other methods. It is stronger
> > and sturdier. Perf board comes in a close second, and manhattan is
> > probably the worst.
> >
> > With manhattan construction you always have the possibility that your
> > pads will come loose and your circuit won't work!
> >
> > {Perf board is stronger, but you may still have problems with
> > interconnections.
> >
> > A well designed circuit board solves most of these problems, even a run
> > of one is neater with nothing to come loose!
> >
> > Now if you take speed of construction into account, manhattan is
> > probably first, perf board is second, and PC boards come in third!
> >
> > 73
> >
>

Date: Wed, 06 Mar 2002 19:37:22 -0500
From: Pete Burbank <plburbank@kih.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121460] Re: PCB etchant
Message-ID: <5.0.2.1.0.20020306192737.00aed310@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 06:24 PM 3/6/2002 -0500, Dave Richards wrote:
>Hmm Interesting...Where does one get carbon rods these days?
>Dave
>W1QB
SNIP

These rods were from one of those hi-temperature soldering devices.
When I was a boy you could get the rods by carefully taking apart dry cell
batterys.

I used carbon just to make sure there were no strange reactions with
any metals.

I hesitated before posting the message but thought it was interesting.:-)
Some of us are easily amused! :-)

73

Pete NV4V

Date: Wed, 06 Mar 2002 17:39:18 -0700
From: "P.Ermisch" <ermisch@usa.net>
To: <qrp-1@Lehigh.EDU>
Subject: [121461] Re: [Re: OT: 'true RMS' measurement]
Message-ID: <20020307003918.7089.qmail@uwdvg003.cms.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: quoted-printable

George (and others),

Thanks much for the response(s) - this really helped me to figure out whether or not to get the meter. It's frequency range was only to 2mHz. I= t also had a capacitance function but there are cheaper and more accurate w= ays to get that. FYI, the meter is a Wavetek 2030 - retails for about \$300 an= d I found one for \$150. Thanks again to all who responded.

Paul KB0LUR

"George, W5YR" <w5yr@att.net> wrote:
> (long reply deleted) =

=

Date: Wed, 06 Mar 2002 19:40:46 -0500
From: Harry Hurst <wa3ptg@comcast.net>
To: lew@paceley.com,
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [121462] Re: 40673's
Message-ID: <002301c1c570\$b9dc0de0\$0200a8c0@icomcast.net>
MIME-version: 1.0
Content-type: text/plain; charset=Windows-1252
Content-transfer-encoding: 7BIT

With all due respect, Lew, when a transistor's price reaches \$8.95 ea., they are long gone!

40673s were good, but not THAT good. There are plenty of newer designs.

Hap, WA3PTG
Wilmington DE

Subject: Re: 40673's

> Folks,
> As I said in my post, the NTE222 (in a T0-72 package) is available
> through Mouser and is listed as a direct substitute for the 40673.
> They have 438 in stock as of 3/5/02 at 10PM. If you want to recreate
> an older design that uses 40673s you can do it simply by sending
> Mouser \$8.96 for each NTE222. Or you can order NOS 40673 parts from
> Dan's Small Parts or others.
>
> 40673 originals and substitutes are still available and are not "long
> gone" for the small qty. homebrewer despite the posts to the contrary.
> > N5ZE

Date: Wed, 6 Mar 2002 20:20:43 -0500
From: "John L. \"Jake\" Carter" <jakecart@ix.netcom.com>
To: "GQRP" <GQRP@yahoogroups.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>,
Subject: [121463] Fireball 40 amp - Altoids style, de N4UY
Message-ID: <GCECIJFJPOHMCKACOA0BOEJC DJAA.jakecart@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Wondering what to do with that Fireball 40 amp "bag of parts" kit?

Build it "Manhattan style", put it in an Altoids tin, hook your Tuna Tin II
up to it and get on 40m with about 2 watts.

Here, of course, is the picture.
<http://mywebpage.netscape.com/jakeycarter/FB40+Altoid+Amp.jpg>

Looking for the Tuna Tin II? -- its here
<http://mywebpage.netscape.com/jakeycarter/Tuna+Tin+Altoids.jpg>

How about an Altoids TiCK Keyer. I put a 3 AA battery holder in the Altoids
first -- to see how much room I had. Then I cut a piece of PC board to fit
the available space and used a Dremel tool to cut lands in the PC board.

The result - kind of a big surface mount TiCK Keyer. I've used this keyer for over a year -- with the same 3 batteries. (I've had about 1200 CW QSOs during that time). I don't know how long the batteries will last but they're doing great so far :-)

Fuzzy pic of Altoids

<http://mywebpage.netscape.com/jakeycarter/Altoids+TiCK+2.jpg>

Good pic showing PC board detail

<http://mywebpage.netscape.com/jakeycarter/Altoids+TiCK+1.jpg>

Can you tell I recently got a new camera?? :-)

73,

Jake -- N4UY

-- can you tell I got a new camera? :-)

73,

Jake -- N4UY

Date: Wed, 6 Mar 2002 19:20:50 -0000
From: "frank5838" <frank5838@email.msn.com>
To: <qrp-1@Lehigh.EDU>
Subject: [121464] Arrl Hand Book
Message-ID: <000d01c1c544\$088a1680\$3debfea9@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Any one no where I can get a old arrl hand Book
thank you
Frank

N5VT Pig 432

Date: Thu, 07 Mar 2002 01:30:48 +0000
From: Arthur Moe <kb7ww@easystreet.com>
To: qrp <qrp-1@Lehigh.EDU>, k5di@zianet.com
Subject: [121465] Cub Fox Log 3/6/02 KB7WW
Message-ID: <3C86C2C8.EA637E4A@easystreet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks to all who showed up for my first try at being on the other end. With no time to get nerves it was great. The band was good at times and then bad. I would get a call and send a report and listen to noise no sig send the report again and more noise. To the stations I missed sorry. There is a ??9R?? out there that called and called but just could not pull him out.

If you have any corrections just e-mail. I hope I copied my paper log ok.

72's Art
KB7WW
Oregon City, Or
CN85

TIME	CALL	S	R	SPC	NAME	PWR
0201	VE4MI	559	559	MB	CRAIG	5W
0203	WA9TZE	559	559	WI	JIM	5W
0205	WA8BXN	559	559	OH	MIKE	5W
0207	W9XU	559	559	WI	LON	5W
0208	W5USJ	559	559	TX	CHUCK	5W
0209	W0CH	559	559	MO	DAVE	900mW
0211	K0EVZ	559	559	ND	DOC	5W
0212	AG0T	559	559	ND	TODD	4W
0215	K8CV	559	559	MI	WALT	5W
0216	AC5JH	559	559	OK	TOM	5W
0218	W5YR	559	559	TX	GEORGE	5W
0219	NJ9K	559	559	WI	DICK	5W
0221	K5SR	559	559	TX	DALE	5W
0223	KL7IXI	559	579	WA	MIKE	4W
0224	KC1FB	559	559	CT	JIM	5W

0229	AF4PS	559	559	FL	MAC	3W
0229	KC0IIN	559	559	CO	JASON	5W
0233	N9NE	559	559	WI	TOD	5W
0235	N9AW	559	339	WI	JERRY	5W
0238	K5JHP	559	559	TX	BILL	5W

TIME	CALL	S	R	SPC	NAME	PWR
------	------	---	---	-----	------	-----

0239	WE9K	559	559	WI	GLENN	5W
0240	N5ZE	559	559	TX	LEWIS	5W
0242	K5DW	559	559	TX	DON	5W
0243	N5GJQ	559	559	LA	MIKE	5W
0245	KE6RS	559	559	CA	RON	5W
0247	NK9G	559	449	WI	RICK	5W
0250	KI0II	559	559	CO	RON	1W
0253	AF4PS	559	459	FL	MAC	3W
0255	AF4LQ	559	559	KY	MIKE	5W
0256	KK5LD	559	559	TX	DAN	5W
0259	W9HL	559	539	IL	RANDY	5W
0308	KC0JPY	559	559	CO	BRYANT	5W
0309	AJ4AY	559	559	AL	JAY	4W
0311	N1TP	559	559	FL	TOM	5W
0313	AA50	559	559	LA	VERN	5W
0317	K0FRP	559	559	CO	AL	5W
0322	N4ROA	559	559	VA	DAN	5W
0333	K4ADI	559	339	SC	FRANK	5W
0336	WB6BWZ	559	339	CA	MATT	5W
0337	NQ7T	559	559	WA	GARY	500mW

TIME	CALL	S	R	SPC	NAME	PWR
------	------	---	---	-----	------	-----

0340	KC9LC	559	559	VA	RANDY	5W
0348	KJ0C	559	559	MO	JIM	5W
0350	KC0GXX	559	339	NE	TOM	1W
0356	K7OZN	559	559	WA	BILL	5W
0359	W8MES	559	559	MI	FRANK	5W
0400	KB7WW			OR	ART	5W Cub Fox

Date: Wed, 6 Mar 2002 18:33:57 -0700 (MST)
 From: "Paul Harden, NA5N" <na5n@rt66.com>
 To: Bruce Muscolino <w6toy@erols.com>
 Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
 Subject: [121466] Re: Pc Boards Got em ! but No Knowledge
 Message-ID: <Pine.SUN.4.10.10203061813380.19758-100000@shell.rt66.com>
 MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 6 Mar 2002, Bruce Muscolino wrote:

> and manhattan is probably the worst.

>

> With manhattan construction you always have the possibility that your
> pads will come loose and your circuit won't work!

I totally disagree with this assesment. Myself, and scores of others, have built lots of stuff Manhattan style and I don't have pads that have come loose dangling in mid air. I have glued down maybe 2 or 3 pads on circuits I have built, and that was from putting excessive stress on the pad swapping components, and it finally broke loose. A drip of glue and it was back on the board. Once you have your components soldered onto the pads, the resistor wires, etc. makes everything pretty rigid. And even if a pad or 2 breaks loose and lifts a few femto inches off the board, it certainly isn't going to suddenly render the circuit inoperative.

Anyone who has actually built something manhattan style knows this.

> Now if you take speed of construction into account, manhattan is
> probably first, perf board is second, and PC boards come in third!

Again, I totally disagree with this statement, in fact, you got it completely backwards. A PC board is the easiest/fastest to build. Plop in the parts per the silk screened labels, flip over and solder, and walla - done. You've seen the posts on qrp-l how "I built my SW40+ in 4 hours." Perf board would be 2nd for the same number of components, plopping in the components, bending the leads to their destination and soldering ... usually making it up as you go along. Finally is Manhattan. I've built lots of stuff Manhattan and love the technique, but it *is* far more time consuming than stuffing out a ready-to-go PC board. You have an hour or two of investment just laying it out on a piece of paper before you build, then start building it, gluing down a pad or two at time as you go along. It's time consuming, but many people don't mind as it is also an "artistic expression" to make it look as neat as possible. I'm sure anyone who has actually built Manhattan style would agree that it probably takes about twice longer than merely stuffing a PC board. Then add another 20 minutes per IC! :-)

On a related subject, I have found those manhattan projects I've built, where I shined it up with steel wool, seemed to tarnish in several months, while those I buffed cleaned with a good old 3-M "greenie pad" (submarine language!) are still shiny. The worst experience was sending a rig I built to the east coast for a couple

of months ... it came back nearly black! Acid rain or something.

72, Paul NA5N

Date: Wed, 6 Mar 2002 19:35:44 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'Karl F. Larsen'" <k5di@zianet.com>,
"Low Power Amateur Radio Discussion (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [121467] RE: 'true RMS' measurement
Message-ID: <01C1C546.1C3E1DA0.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

That's not exactly correct. The 'voltage doubler' type rf probe is still a peak reading circuit.

The simple way of getting a reading in RMS with a peak reading probe (whether one or two diodes) is by using a voltage divider. A series resistance is part of the divider, and the internal resistance of the voltmeter (usually 10M-0hm) is the rest. The division ration is chosen so that the meter reads 0.707 times peak, which is RMS.

But this isn't 'true RMS' or anything like that. It's based on a sine wave. And for what we do--that's generally good enough.

72--Nick, WA5BDU

-----Original Message-----

From: Karl F. Larsen [SMTP:k5di@zianet.com]

> It was found that using 2 diodes in a voltage double configuration
>has advantages. The meter's impedance goes down but the DC current gets
>cleaner and it's easier to calibrate the meter. And this circuit with a
>capacitor at the output of the diodes measures RMS voltage.

>If your probe has 2 diodes and a capacitor you will be
>measuring RMS voltage.

Date: Wed, 6 Mar 2002 19:47:15 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [121468] RE: Open Wire Line and Balanced Tuner
Message-ID: <01C1C547.B7FDD4A0.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: Karl F. Larsen [SMTP:k5di@zianet.com]

>Yes it's quite a site. I wonder how you call this a no-tuner system? He
>has transmission line transformers that he switches in and out.

Well, that's technically correct, I guess; but most people visualize a
tuner as a box with some L's and C's inside. You're really insisting on
rigid use of terms if you don't see how this is a no-tuner system.

On Wed, 6 Mar 2002, Pastor-KC1DI wrote:

> Ceil Moore's , W5DXP has an interesting web sight that discribes his no
> tuner all band antenna system. basically it's a 136 foot dipole fed with
450
> ohm line that is adjusted for length inorder to give close to a 50 ohm
> match.

>Of corse a Capacitor is needed to tune out reactence but it's quite a
> system.

Right, except there is no capacitor to tune out reactance; this system is
tuned by changing the length of the line--only.

> Here's the web sight.:
> <http://www.qsl.net/w5dxdp/notuner.htm>
>

Date: Thu, 07 Mar 2002 00:25:45 +0000
From: Larry Cahoon <lejek@erols.com>
To: walter@cowboy.com,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [121469] Re: More on the 'Miracle Whip'
Message-ID: <5.1.0.14.0.20020307001544.00b8a438@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I take these antenna shoot-outs with a grain a salt and little else. This one does a good job of showing what that did. But there are so many variables in the various systems that the comparisons are next to impossible to interpret.

Just as an example, as I read this one the comparisons are based on a single measurement point some 80 meters form the transmitters. A major problem with this is that I am seldom interested in what my antenna will do at 80 meters. I care a lot more about distances like 500-2000 miles on 20 meters. At that point the take off angle from the antenna means a lot more to me. A low takeoff angle works real well at 1500 miles. At 500 miles I want a higher takeoff angle. Any of these comparisons have to give the full description of the gain and radiation pattern for the antenna. That simply cannot be reduced to a single number.

73 de Larry.....WD3P in MD
USA-CA at an average power of 6.05 watts and falling.....
<http://www.qsl.net/wd3p/>

At 08:31 AM 3/6/2002 -0700, Walter AG5P wrote:
>If you would like to read how it performed at an
>antenna shoot-out, then go to the HF Pack website
>and click on Antennas. Scrowl down and read how
>the different antennas performed against each other.
>
><http://www.hfpack.com/>
>
>There are several antenna shoot-outs each year
>that are sponsored by various groups which gives
>the antenna guru's a chance to show their expertise
>in mobile, portable, and fixed antennas. Try doing

Date: Wed, 6 Mar 2002 20:15:53 -0600
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: <AQRp@yahoogroups.com>, <qrp-1@Lehigh.EDU>,
"QRPP International Membership" <membership@QRPP-I.com>,
Subject: [121470] The Rogers /Dobbins ARL Folded Conical Helix Antenna paper now published. Revolution in small HF Antenna design!
Message-ID: <014a01c1c57e\$06fba1f0\$4e100a0a@rohredt2000>

As some of you have heard me hint for about a year, a revolution in small HF Antennas is unfolding at Applied Research Labs, Univ. of Tx. I have been an observer of experiments, sounding board, and kibitzer for antenna design.

Excuse my pride and enthusiasm, but my co worker, Dr. Bob Rogers, KM5DR, really has hit on something of interest to antenna location challenged hams. Should we call this the Sun City Antenna? Or we might christen this the "Condo Cone".

The publication is in "IEEE Transaction on Antennas and Propagation", Vol. 49, no. 12, December 2001. I have just received my reprint. The title is "Folded Conical Helix Antenna" by Justin Dobbins, and Robert L. Rogers. (I will eventually be testing a HF version of this antenna, on 10 meters.)

The antenna takes the conical monopole to a new twist. A funnel shaped structure of PVC pipe or wood, or other insulator ribs, holds a spiral folded dipole like wire arrangement.

The initial paper concerns a low VHF model, however, further experiments have shrunk a 10m resonant antenna, based on this principle, to a volume of less than two cubic feet.

It can be further reduced in height over the example in the paper, and calculations show that it should be possible to operate on 160m with a patio fitting antenna with 90 per cent efficiency! That was not a misprint, 90 per cent! No loading elements of lumped components, (with attendant losses), are needed. You do have to use a transmatch to move around the band.

Materials to make the elements include two differing diameters of wire; even RG 58 has been used for one element that is coiled into the funnel. The folding of the element overcomes the fact that an electrically small cone would have an input resistance much less than 50 ohms at first resonance. Folding raises this back to 50 ohms. The fold is a shorted transmission line. This antenna was produced without dielectric loading. However, that is another method of altering the resonance.

Attempts to calculate the SWR and input impedance with NEC 4 did not give consistent results. The design is small in terms of wavelength, and this might be a factor. The folding of the radiators greatly affects these electrically small antennas. At present, each is a one band antenna. However, as to performance, a Radio Shack 10 M rig was used to work FM into the East Coast, (from Austin, TX,) on days of only average propagation with that version. Good signals were obtained both ways. The Antenna has been tested over a 2m X 2m square metal ground plane, as well as in an open field over shallow limestone rock. Increasing the sides of the ground plane did not materially increase the signal. The Antenna IS doing the radiating.

The pattern of this antenna is much like that of a vertical (elemental monopole), that is ground mounted. The vertically polarized power level was 22 dB above the horizontally polarized component. The antenna gain is 4.7 dBi, (over isotropic).

This publication is available at most College libraries with an Electrical Engineering Dept. I would imagine your local library could obtain it on interlibrary loan. Reprints will be sold by IEEE. Other papers are in preparation, and I have urged Bob to build one for something like 160M, 80M or 40M and maybe other bands, and write it up for QST, QEX, or another ham publication.

The big thing about this approach to a small antenna is that it retains a resonant length of radiator, while more efficiently using a confined space. I think this is why the efficiency is so high compared to other "trick" antennas which are little more than radiating tuned circuits or capacity hats.

I hope others will be inspired to experiment with this concept. All you need is a ring of insulator material to form the wide part of the cone, (such as cut from large diameter PVC pipe), and some spokes or pipe to go down and in to the narrow part where the feed is placed. Supports for the spiral of folded transmission line have been successfully fabricated from fiberglass strips, or other plastic, or even fish line. The antenna is fitted INSIDE the cone frame, which is an open frame, not closed in at all, thus minimizing materials. Ham ingenuity can be put to the full test with arrangements for various bands. It is conceivable that a smaller cone could be fitted inside a larger, lower band cone, and still have both work. There are many, as yet, unanswered implementations, and this is why Bob said I could let the word out now, to encourage further development in the ham bands.

73,
Stuart Rohre K5KVH

Date: Wed, 6 Mar 2002 21:25:38 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <frank5838@email.msn.com>,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [121471] Re: Arrl Hand Book
Message-ID: <003d01c1c57f\$60b3d040\$0600a8c0@charter.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

How old? Specifically? Or just old?

Also, to look at? To borrow? To buy?

Mike

----- Original Message -----

From: "frank5838" <frank5838@email.msn.com>

> Any one no where I can get a old arrl hand Book
> thank you
> Frank
> N5VT Pig 432

Date: Wed, 6 Mar 2002 20:28:58 -0600
From: "W5TB" <w5tb@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121472] Ducie update
Message-ID: <00dd01c1c57f\$d62434a0\$0200a8c0@altn1.tx.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

someone asked -- here's an update from the latest dx newsletter

DUCIE ISLAND, VP6, OC-182

The departure from French Polynesia is planned for March 12. =
VP6TC,

VP6DB, VP6AZ, VP6MW, VP6BK/JA1BK, JF1IST, K9AJ, K5VT and N9TK will
first travel to Pitcairn Island. They plan to operate from there =
on

21020 kHz (CW) and 21295 kHz (SSB) for 24 hours. Other frequencies
will be 28495, 14195 and 14020 kHz. Further activitiess are =
planned

on 160-6m geplant. Later the logbook will be available on the =
website

<http://www.big.or.jp/~ham/dx.html>. QSL via VE3HO (HF) and JA1BK =
(6m).

72, 73, oo T.E. 'Doc' Drake, W5TB

Arlington, Texas

FISTS # 5365 QRPARCI # 3532 ARRL Life Member K1 #181 K2#1617=20

Date: Wed, 06 Mar 2002 21:36:02 -0500
From: John Wagner <john@wagner-usa.net>
To: <na5n@rt66.com>,
Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [121473] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <B8AC3C42.72A%john@wagner-usa.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

>> Now if you take speed of construction into account, manhattan is
>> probably first, perf board is second, and PC boards come in third!
>
> Again, I totally disagree with this statement, in fact, you got it
> completely backwards. A PC board is the easiest/fastest to build.

This is taken out of context Paul - we're talking about designing a board on a computer, etching it, drilling it and then building. My initial observation/question was that I didn't see why me, as a hobbyist would etch a board vs. build Manhattan style.

That being the case, Manhattan style would probably be quicker. Building a kit, you're right - but totally from scratch, I'd say Manhattan is faster. (and I say that from inexperience, I've never designed or etched a board).

I do concur with you that Manhattan style can be quite slow; my MH101 SW-30+ took weeks, while I assembled my SW-80+ (kit form) in a night or two.

> On a related subject, I have found those manhattan projects I've
> built, where I shined it up with steel wool, seemed to tarnish in
> several months, while those I buffed cleaned with a good old 3-M
> "greenie pad" (submarine language!) are still shiny. The worst

I find the greenie pad works well too.

Also, FWIW, I now clean and buff my copper board stock prior to punching out pads and find they stick much better.

73,

John, N1QO

> experience was sending a rig I built to the east coast for a couple
> of months ... it came back nearly black! Acid rain or something.

>
> 72, Paul NA5N
>
>
>

Date: Wed, 6 Mar 2002 21:52:06 -0500
From: "George Osier" <gosier@twcnny.rr.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [121474] #99 today :)
Message-ID: <001f01c1c583\$11974b00\$0e714342@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello All !!!!!

Got #98 yesterdayVP9/W6PH700 mw

Now today #99 !!!!!

SN8V5/26/011651 UTC700 mw !!!!!

1 MORE !!!!!

73s

George , N2JNZ / QRPp

Date: Wed, 6 Mar 2002 19:02:31 -0800
From: "Doug Hendricks" <ki6ds@dospalos.org>
To: <qrp-l@Lehigh.EDU>
Subject: [121475] RE: Pc Boards Got em ! but No Knowledge
Message-ID: <000401c1c584\$a6aa2d10\$1fa3ad40@DOUG>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

Kory, here is how I do IC's Manhattan style. I take a piece of pc board and cut it 3/4" x 3/4". Then, I take a hacksaw or a dremel tool, and just cut

through the copper, dividing the piece in half, but still in one piece as the fiberglass is not cut through. I turn it 90 degrees and repeat the cut, so that now I have a board with 4 quartiles. Next, I divide each quadrant in half with another cut. Let me see if I can do this in ascii.

```

  8  7  6  5
-----
|  |  |  |  |
|  |  |  |  |
----- (First Cut)
|  |  |  |  |
|  |  |  |  |
-----
  1  2  3  4

```

There it is, and I hope you get the idea. I then glue the IC "pad" down and then usually I use a 8 pin socket. Works for me. I got the idea from looking at how Jim Kortge did his, (he uses individual pieces for each pad made by an Adel nibbler). I didn't have a nibbler that did the right sized pads, so I came up with the above method. Have used it several times, and it works fine. 72, Doug

```

-----
Date: Wed, 06 Mar 2002 22:04:45 -0500
From: Chuck Ludinsky <cjl@mitre.org>
To: neqrp@jona1.net, qrp-1@lehigh.edu
Subject: [121476] NEQRP CW Net, 7 March 02, 8:30 EST, 3.565 MHz
Message-ID: <3C86D8CD.3020400@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

```

The New England QRP Club's WQ1RP CW net meets again Thursday night, 7 March 2002, at 8:30 PM EST (0130Z, 8 Mar 02) on or near 3.565 MHz. Net control operator for this week's session will be John, K1RC, operating from Dracut, MA.

With quite a lot of noise through the first half of last week's net (at least here in Chelmsford), we had a total of nine participants:

AA5JO	ED	Tyngsboro, MA	579
K1LGQ	DENNIS	Brookline, MA	599
N1VS	VINCE	Winsted, CT	599
W5TEH	LEE	Newport, RI	479
AA1MY	SEAB	Bethel, ME	599
WB1HBE	JOHN	Chelmsford, MA	599

KB1DSB	KARL	Bomoseen, VT	599
AF4AT	JIM	NC	559
K1CL	CHUCK	Chelmsford, MA	net op

Welcome to Karl and Jim; I think this was your first check-in to the net.
Nice to hear you. Thank you, as well as everyone else, for QNI'ing.
Please stop by again this week, and say hello to John and everyone on the net.

72 DE K1CL,
Chuck.

Date: Wed, 6 Mar 2002 21:13:18 -0600 (CST)
From: Bruce Rattray <rattray@gpfn.sk.ca>
To: "Fancher, Mark (GEAE)" <Mark.Fancher@ae.ge.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [121477] Re: Ducie Island
Message-ID: <Pine.LNX.4.33.0203062112140.10957-1000000@neale.gpfn.sk.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I believe they're heading out somewhere about March 12 or 16th...stopping at Pitcairn island to pick up some gear and then onward to ducie...

..72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272
A-1 Operator Club - 10/10# 944 - QRP Borg#1 - Whiner#10 -
- VE5QRP SOC#11 - VE5RC SOC#12 - oo#148 - K2#2032 - COG#15 -
"QRP! How sweet it is!" "I am da man wit "DAH" paddle!"

On Wed, 6 Mar 2002, Fancher, Mark (GEAE) wrote:

> Anyone heard any updates about this operation lately?
>
> Mark, AA4MF
>

Date: Wed, 6 Mar 2002 22:25:43 -0500
From: "V Cortina" <vcortina@hvc.rr.com>
To: <frank5838@email.msn.com>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [121478] Re: Arrl Hand Book
Message-ID: <010201c1c587\$c3d5a560\$6401a8c0@hvc.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Frank,

How old is old? I have a 1972 and a 1979. Heck, I've got a QST from 1949!
Just curious.

Vinny KR2F
Mt. Tremper, NY FN22ua
F.I.S.T.S. #4582, QRP-L #2397
NJ-QRP #349 QRPp-I #382
E.C.A.R.S. #20188 10-X #68971
1 more year to QCWA

----- Original Message -----

From: "frank5838" <frank5838@email.msn.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, March 06, 2002 2:20 PM
Subject: Arrl Hand Book

> Any one no where I can get a old arrl hand Book
> thank you
> Frank
> N5VT Pig 432
>
>
>

Date: Wed, 06 Mar 2002 21:26:29 -0600
From: "George, W5YR" <w5yr@att.net>
To: Stuart Rohre <rohre@arlut.utexas.edu>
Cc: AQRP@yahoogroups.com, qrp-l@Lehigh.EDU,
QRPP International Membership <membership@QRPP-I.com>,
Subject: [121479] Re: [TenTec] The Rogers /Dobbins ARL Folded Conical Helix
Antenna paper
now published. Revolution in small HF Antenna design!

Message-ID: <3C86DDE5.79B9A161@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Stuart, you are one of the best at the King's English, but you *must* put up some sketches on a convenient web site so that we can all be looking and thinking about the same thing. As it is, I fear that 20 different guys will have 28 different ideas of what you are talking about! <:}

Seriously, I know that you seldom fire many blanks, so a sketch or two would really help to ensure that we know what you are talking about.

Thanks . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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Stuart Rohre wrote:

>

> As some of you have heard me hint for about a year, a revolution in small HF
> Antennas is unfolding at Applied Research Labs, Univ. of Tx. I have been an
> observer of experiments, sounding board, and kibitzer for antenna design.

Date: Wed, 06 Mar 2002 21:37:10 -0600
From: "George, W5YR" <w5yr@att.net>
To: nkennedy@tcainternet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [121480] Re: Open Wire Line and Balanced Tuner
Message-ID: <3C86E066.D485A20B@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Cecil has described a general technique for a single band system in which a proper size of capacitor is placed across the line at a critical location to obtain the desired input impedance. I do not know if his multi-line-section system still uses the parallel cap(s) along the line(s) or not.

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Nick Kennedy wrote:

>
> -----Original Message-----
> From: Karl F. Larsen [SMTP:k5di@zianet.com]
>
> >Yes it's quite a site. I wonder how you call this a no-tuner system? He
> >has transmission line transformers that he switches in and out.
>
> Well, that's technically correct, I guess; but most people visualize a
> tuner as a box with some L's and C's inside. You're really insisting on
> rigid use of terms if you don't see how this is a no-tuner system.
>
> On Wed, 6 Mar 2002, Pastor-KC1DI wrote:
>
> > Ceil Moore's , W5DXP has an interesting web sight that discribes his no
> > tuner all band antenna system. basically it's a 136 foot dipole fed with
> 450
> > ohm line that is adjusted for length inorder to give close to a 50 ohm
> > match.
>
> >Of corse a Capacitor is needed to tune out reactence but it's quite a
> > system.
>
> Right, except there is no capacitor to tune out reactance; this system is
> tuned by changing the length of the line--only.
>
> > Here's the web sight.:
> > <http://www.qsl.net/w5dxd/notuner.htm>
> >

Date: Wed, 6 Mar 2002 22:37:59 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [121481] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <000e01c1c589\$972bb520\$010044c0@chartermi.net>

MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I do something similar....

I use the 'normal' IC sockets with the flat pins. The nice machine pin sockets don't work for this.

I splay the leads of the socket so it lays flat, and place it on a piece of copperclad slightly larger than the socket. I mark between each of the pins with a pencil.

Then I take a metal rule and a plexiglass knife and score to the marks, and one through the center, pretty much the same picture as Doug's, except the scores end up pretty close to 0.1" apart. The plexiglass knife leaves a fairly wide groove. Generally I'll check it by shining light through it while looking with a good magnifier to be sure I didn't leave any little copper hairs. Then I solder the socket to the pad.

A little crude but it seems to work out fine.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Doug Hendricks" <ki6ds@dospalos.org>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Wednesday, March 06, 2002 10:02 PM
Subject: RE: Pc Boards Got em ! but No Knowledge

Date: Wed, 6 Mar 2002 21:10:15 -0600
From: "Robert Armstrong" <barmstrong@sisna.com>
To: <qrp-l@Lehigh.EDU>
Subject: [121482] Wilderness alert
Message-ID: <009a01c1c585\$9b5a6780\$dbb4d2d1@barmstrong>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Please listen for Allan (K7GT) and Bob (N7XJ) Friday March 8 through Wednesday Mar 13 near the 40 meter QRP CW freq in the evenings. We will be

backpacking in the wilds of southern Utah (Coyote Gulch - Escalante River sidecanyons near Lake Powell).

73,

Bob N7XJ
Manti Utah

Date: Wed, 6 Mar 2002 22:28:46 -0600
From: Nick Kennedy <nkennedy@tcainternet.com>
To: "'George, W5YR'" <w5yr@att.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [121483] RE: Open Wire Line and Balanced Tuner
Message-ID: <01C1C55E.48810FE0.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi George--

Nope, no caps in this one.

I was buying relays and stuff to build one. Then I found this beautiful old Matchbox ...

72--Nick, WA5BDU

<http://www.qsl.net/w5dxdp/notuner.htm>

-----Original Message-----

From: George, W5YR [SMTP:w5yr@att.net]

Cecil has described a general technique for a single band system in which a proper size of capacitor is placed across the line at a critical location to obtain the desired input impedance. I do not know if his multi-line-section system still uses the parallel cap(s) along the line(s) or not.

Date: Wed, 06 Mar 2002 23:38:35 -0500
From: Lourette <lourette@localnet.com>
To: qrp-1@Lehigh.EDU
Subject: [121484] Antennas & More?
Message-ID: <3.0.5.32.20020306233835.0082e6e0@mail.localnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Is this place still in business <http://www.antennasmore.com/> ?

I get no replies from inquiries? I am fond of their WindomHSQ antenna.

Rich

--

Richard Lourette
AB2MD@arrl.net
lourette@localnet.com

Date: Wed, 06 Mar 2002 23:46:41 -0500
From: "Mark J. Dulcey" <mark@buttery.org>
To: john@wagner-usa.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [121485] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <3C86F0B1.8040307@buttery.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

John Wagner wrote:

> So why would someone who isn't designing a production run of a kit/product
> bother [to etch a board]?

First, some hams actually are designing with the hope of turning their design into a kit. Not just the commercial guys, but also some builders like KD1JV who do limited kit runs of some of their stuff, the QRP clubs that make kits, and so forth.

Second, some parts, especially surface mount components, really have to be put on printed circuit boards. Mounting an SOIC or other small surface mount package Manhattan-style isn't likely to work well. I have seen hybrid designs where such parts are on small boards just for that component, and other parts of the circuit are done Manhattan-style.

Microwave work is likely to require circuit boards. The circuit traces themselves are part of the design - their inductance and capacitance

actually matter at those frequencies.

Finally, some hams enjoy the challenge of making their designs look like the commercially built ones. A Manhattan-style rig will always appear to be hand built.

Date: Wed, 6 Mar 2002 22:53:11 -0600
From: "SAAD MAHAINI" <N5FF@attbi.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [121486] FS: Shurr paddle
Message-ID: <044901c1c593\$fc555640\$4b03ed0c@attbi.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello,

I have a brand new Schurr Portable Mini paddle that was designed to be a nice companion to the FT-817 or other portable setup. Again, it's still in the original wrapping. Morse Xpress sells them for \$190 + shipping. I want \$160 for it.

73s Saad N5FF

Date: Wed, 06 Mar 2002 23:01:35 -0600
From: "George, W5YR" <w5yr@att.net>
To: "nkennedy@tcainternet.com" <nkennedy@tcainternet.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [121487] Re: Open Wire Line and Balanced Tuner
Message-ID: <3C86F42F.C937C9C8@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good deal, Nick! I find it easier to twist knobs than to get up and throw knife switches, etc. but Cecil likes his method and that is what counts for him.

BTW, you should have let me know that you wanted a Matchbox. I have a KW Matchbox that looks just about like it did the day it left the Johnson

factory. Need to trade it off for something . . .

72/73/oo, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

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Nick Kennedy wrote:

>
> Hi George--
>
> Nope, no caps in this one.
>
> I was buying relays and stuff to build one. Then I found this beautiful old
Matchbox ...
>
> 72--Nick, WA5BDU

Date: Thu, 7 Mar 2002 06:20:28 EST
From: K5BDZ@aol.com
To: lebloke@netcom.ca, GQRP@yahoogroups.com, hqrp@stevens.com,
qrp-l@lehigh.edu
Subject: [121488] Re: [GQRP] Note from Miracle Antenna...
Message-ID: <f2.17e442d1.29b8a6fc@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Robert and group

I must admit laughing at the thread(s) concerning the pricing of this and other ham products. Having built two manufacturing firms (one sold) as well as a communications company, I can attest to the costs of bringing a quality product to market.

I also remember a ham radio "garage sale" - local expression meaning we collect all unwanted household items in our garage, put up "garage sale" signs in the area, and sell all...usually very CHEAP.

A fellow ham and I had a ham radio garage sale in which he had a large box of aluminum panels and chassis, with a sign "FREE" on the box. After 2 hours no

ham had even looked through the box. My friend was perplexed that no "frugal" hams would take a free item. I explained "free" is not what hams want...they want a "good deal" or a "Steal!"...so he put a new sign reading "\$.10 each"... and within 5 minutes some ham offered him \$10.00 for the whole box!

Ahhh the many reasons and means to part a ham from his money!

To all clubs, small companies, and individuals who provide we hams with quality products, a Hearty THANKS! for all your persistence and patience! Where would we be without all of you?

Bill K5BDZ

Date: Thu, 07 Mar 2002 06:38:04 -0800
From: Joseph Mikuckis <k3chp@erols.com>
To: QRP-L Mailing List <qrp-l@lehigh.edu>
Subject: [121489] Delaware
Message-ID: <3C877B4A.203F2ADC@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Moving to Delaware! Will be there after April 10th and expect to be on the air with MP-1 antenna as an emergency setup; soon after that I should be on WARC bands with a dipole; and later still, with an all-band vertical or a Yagi. No deed covenants and/or restrictions! I QSL 100%.

Joe, K3CHP
Riverdale, MD

Date: Thu, 07 Mar 2002 07:57:37 -0500
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-l@lehigh.edu
Subject: [121490] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <5.1.0.14.1.20020307074942.00a55ca0@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 05:23 PM 3/6/2002 -0500, you wrote:
>This may seem like a dumb question, but...
>

>Why would a hobbyist like myself want to etch a board?

John,

Um... because it's there? (Grin) In my case, I do it when I have SMT components with leads that just don't fit on Manhattan pads. (I just built a DDS synth using an Atmel controller in a TQFP package and a DDS chip in a TSSOP-16 package. If not for the stereo microscope in the lab at work I wouldn't have been able to solder the thing together.

>I started building with kits (and prefab boards) and moved on to Manhattan style building. It seems to me that Manhattan style removes the need to;
>

>1. Learn new and possibly frustrating software programs.

>2. Avoid messy (possibly dangerous?) chemicals.

>

>And it:

>

>1. Speeds construction.

>2. Promotes experimenting.

>3. Makes it easier to troubleshoot.

Agreed on all points. I do Manhattan or ugly style whenever possible. But I use ICs a lot, and in some cases it's actually quicker for me to do a layout and etch a board. Also, if you'd like to share your project with the rest of us in a magazine article, a PCB layout sure helps.

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton

Dave Hinerman

WD8CIV@worldnet.att.net

Date: Thu, 07 Mar 2002 08:27:19 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: John Wagner <john@wagner-usa.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [121491] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <3C876AB7.C4AF0786@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

John,

I'll agree that as long as everything stays soldered the assembly is probably strong enough. But what happens when you also bump it? Manhattan construction is an old breadboarding technique used in industry. It's major advantages are that it is fast and friendly to RF. I don't know any design engineer who would take such an assembly to the field!

As far as your K1 goes, how many boards do you think they sold up to yours?? One failure is a pretty good record!

73

>

> I have to disagree with you about Manhattan style not being as robust a
> method of construction. Well, not completely, I will concede that it's
> probably not AS robust as a PC board - but - it's not weak by any means. I
> have had pads come up, but as long as everything is soldered together it's
> not a problem. I've also had the copper foil lift off, but again, as long as
> it's all soldered together the circuit works fine.

>

> On the opposite side of the coin, when I built my K-1 one of the channels
> under the crystal came loose and the through-hole connection was iffy, which
> caused the radio not to function correctly. I ended up having to send the
> radio in to be fixed as I couldn't figure out the problem (it looked fine!).

>

Date: Thu, 07 Mar 2002 08:39:53 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: lejek@erols.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [121492] Re: More on the 'Miracle Whip'
Message-ID: <3C876DA9.D1075B11@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Any antenna shoot-out is just that, a shoot-out! The relative ranking is really a function of many variables, and if the shoot-out is done by individuals the factors may be weighted to show their antenna in the best light! I don't blame you for taking them with a grain of sand. The performance of any antenna is really highly personal and very dependent in the installation!

However, I must note that contacts of 500 to 2000 miles are easy to do on 80 meters, if you look at the right time of the evening!

73

Date: Thu, 07 Mar 2002 08:47:25 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: "Paul Harden, NA5N" <na5n@rt66.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [121493] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <3C876F6D.C1880D4F@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Paul,

I have already answered the first part of your message. Now this part:

True, building a kit using a PC board is fastest. But building a breadboard design the first time a PC board is slowest and least efficient. How many designers do you know who would etch a PC card to build a prototype?

>

> Again, I totally disagree with this statement, in fact, you got it
> completely backwards. A PC board is the easiest/fastest to build.
> Plop in the parts per the silk screened labels, flip over and
> solder, and walla - done. You've seen the posts on qrp-l how "I
> built my SW40+ in 4 hours."

Date: Thu, 7 Mar 2002 09:03:28 -0500
From: "Jason Hisson" <jhissn1@columbus.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121494] Dipoles, Windoms, Loops, oh my!
Message-ID: <007d01c1c5e0\$db9b9fc0\$6501a8c0@caladan>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi guys,

Spring is coming and I have been contemplating upgrading/replacing the Alpha

Delta DXLB+. The candidates are a Carolina Windom 40 (yea, the one the broke the record), the Super Loop 40, or building a Skyloop. Question is, which is better? I have heard that the Superloop (or loops in general) are less noisy than dipoles. I have also heard that the Windom does great as a DX antenna. Comments? I cannot put a tower up (not because of CCR's, my town is very nice about towers, but because of \$\$\$\$\$). Will I notice any difference between the dipole I have now, and one of the antennas mentioned above? I have about 70' between two trees to play with and about 55' between a mast that I installed (about 6 feet) and one of the trees. The antenna will be installed about 40 feet. The DXLB+ is a trapped dipole.

Thanks es 73
Jason

N8XE
K2 #1270 looking for a new antenna

Date: Thu, 7 Mar 2002 09:03:49 -0500 (EST)
From: <igeq100@iupui.edu>
To: Bruce Muscolino <w6toy@erols.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [121495] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <Pine.GS0.3.96.1020307085536.28327A-1000000@jade.iupui.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi, Gang -

I am finally going to weigh in on this thread. For a long time I have been building projects in the audio range using perfboard (0.1" centers) and wire-wrapping. In the audio range, at least, this results in a sturdy, good-looking, and dependable circuit with many of the benefits of Manhattan-style construction. I have lots of colors of wire, for color coding and troubleshooting, and I socket all of my IC's. (I hope to have some of my handiwork at FDI). My question is this - has anyone tried wire-wrap at moderate (lower HF) radio frequencies? I suspect that the lead length and the "little inductors" at the end of each wrap might be a problem, and I think that a hybrid Manhattan / wire-wrap approach might do the trick.

Any comments pro or con would be welcome.

72,
Rich, WB9LPU

Date: Thu, 7 Mar 2002 09:13:55 EST
From: W1RO@aol.com
To: qrp-1@lehigh.edu
Subject: [121496] F.S. Argonaut II
Message-ID: <17.245c0de8.29b8cfa3@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Argonaut II 9.5 to look at. Scratch on the surface type scratch on the left side. Otherwise great. Operationally 10. Last month you could buy one from Ten Tec for \$750.00 (radio only). I'm throwing in the base station Microphone and Power supply and shipping for \$650.00. Get it before it goes on E-bay. Love this web site. Email me direct at w1ro@aol.com

72
Jim
W1RO/7

Date: Thu, 07 Mar 2002 09:16:36 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: k5xu@netdoor.com
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [121497] Re: More Hidden Antenna Thoughts
Message-ID: <3C877644.68D3DBE7@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I think hidden antennas are a mark of a real ham! These days even old houses have antenna restrictions. If you can't put up a stealthy antenna, often you can't get on the air! I have lived with antenna restrictions for over 20 years, in private homes! I have been able to get on the air because I could make a decent hidden antenna!

When I first faced the problem, back in 1982, I decided I was a ham, I could make it work. I designed a simple, nut effective approach to getting on the air. I used this antenna until about 5 years ago when I bought this house. I thought, finally, I am in a place where I can have any antenna. Then the homeowner's association hit, we're antenna restricted here too, and this house is going on 30 years old!

Hidden antennas also work very well if you travel or move around a lot.

They can be just as effective as "real" antennas! After you have used them for a while you become familiar with the factors that affect them and your success rate will improve!

73

Date: Thu, 7 Mar 2002 09:34:59 -0500 (EST)
From: George Gingell <k3tks@u1.abs.net>
To: K5BDZ@aol.com
Cc: lebloke@netcom.ca, <GQRP@yahooogroups.com>, <hqrp@stevens.com>, QRP List <qrp-l@lehigh.edu>,
Subject: [121498] Re: [GQRP] Note from Miracle Antenna...
Message-ID: <20020307091315.Y32193-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Bill,

That was absolutely beautiful! I can personally attest to the truth of that philosophy. (Sp?)

I recall a number of times at Dayton where I personally Tested that Theory.

Once I sold a Carcass of a 35D Telephone Test Set, for the Sum of \$ 5.00 after first offering it for "FREE". I might add that I Paid \$ 5.00 for it in the "Flea Market" earlier that day, and promptly Removed the FOUR 6B Telegraph Keys from it. I gave one to Mike C. WA8MCQ, and another to John Collins, KN1H I kept Two Others for myself. One is Mounted on a Marble Trophy Base ("The QRP Key") and the other is Mounted on a Pomona Box Waiting for me to finish building the Transmitter inside.

Mike C. Built his QRP KEY TX years ago. It was in QQ as well. My Maryland Milliwatt QRP Key, has been to many QRP Show and Tells, and Has been used at WQ3RP on many occasions.

I recently sent photos to KA8MAV for the QRPp-I Website. I don't know if they are up yet or not. Check here:

QRPp-I Club <QRPp-I@yahooogroups.com>

And now for the rest of the story. The Carcass of the Test Set was Sold to a Lady who thought that it was "Beautiful" and wanted it for a "Conversation Piece" for her Coffee Table. Naturally, I provided my usual lengthy explanation of what it was and how it was used. :^}

The \$ 5.00 went to "The Maryland Milliwatt Club" for the benefit of the club. We also sponsored a couple of the ARRL Contesting Award Plaques back then. QRP of Course :^}

Now you know the "\$ 5.00 Story".

We also "Sold a Lot of QRP Quarterly back issues for \$ 1.00 back then.

Like you say, People do not "VALUE that which is FREE". Unless they pay something for it, it is not of much value and will likely end up in the dust bin along with all of the other stuff collected at the ham fest.

QRP DX TU...

Sir George, The First :^}

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and Board of Director Member.
Gingell & Company, Ltd. Small Business Telephone Systems
Commercial Locksmith Services (301) 572-6789 Office & Fax
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

Collector of Quartz Crystals and Telegraph Keys.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

Date: Thu, 7 Mar 2002 10:54:28 -0500
From: "Hartwell, Martin E, ALINF" <mehartwell@att.com>
To: <qrp-l@lehigh.edu>
Subject: [121499] QRP+ version number
Message-ID: <6579C6377F475547985F0B3E426E1626140461@OCCLUST01EVS1.ugd.att.com>
content-class: urn:content-classes:message
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Hi

Does anyone know how to tell what version number of upgrade has been done to a qrp+? Does the rig on power up tell you which version the chip is, or can you look somewhere just under the cover?

Marty Hartwell kd8bj
AT&T Columbus Ohio
PH:614-501-2503

Date: Thu, 07 Mar 2002 09:49:39 -0600
From: Joe Wittmer <joe@wittmer.com>
To: qrp-l@Lehigh.EDU
Subject: [121500] FS: Warbler, Notebook...
Message-ID: <3.0.6.32.20020307094939.009528f0@getmail.wittmer.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Group,

I am cleaning up and removing some unused equipment.

If you are interested, please respond directly.

- A. PSK-80 Warbler \$45
 - Built, tested, and added audio gain modification.
 - Hardly used. Board only as I did not put it in a box.
- B. Compaq Presario Notebook \$350
 - 233 Mhz / 90Meg / 3Gig HD
 - New Lithium Battery
 - Win98 Restore Disk
 - Power adapter
 - USB to Ethernet adapter (Linksys USB-10T)
 - Has some worn keys and the 'i' button is not functional
 - I'm the original owner
- C. 7 Gig Quantum Hard Drive \$45 (New)
 - Came with new Dell computer and replaced with bigger drive.
 - tested but not used.
- D. 133Mhz CPU on a MB w/64Meg (4 X 16 - 72 pin simms) \$15
 - has serial / parallel cables and some type of PCI video card.

Buyer pays UPS shipping.

Thanks for the bandwidth.

Joe KB9SIZ
Bement, Illinois

Date: Thu, 7 Mar 2002 09:01:30 -0700 (MST)
From: "Paul Harden, NA5N" <na5n@rt66.com>
To: Bruce Muscolino <w6toy@erols.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [121501] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <Pine.SUN.4.10.10203070831250.21308-100000@shell.rt66.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 7 Mar 2002, Bruce Muscolino wrote:

> Paul,
> True, building a kit using a PC board is fastest. But building a
> breadboard design the first time a PC board is slowest and least
> efficient.

If you are including the time to develop the PC board, then I *am*
in full agreement that it is a time consuming task. But this is a
hobby, so who cares how much time one technique takes over another?

> How many designers do you know who would etch a PC card to
> build a prototype?

Actually, quite a few. With surface mount components, RF circuits
at microwave frequencies where your trace widths alter your
impedances, on-trace filter elements, etc., you often go through
2-3 iterations of prototype boards before the final design is
approved and production can begin.

But this is QRP-L, a HOBBY group, not an industrial design group.
Guys build manhattan style, because they WANT to. Guys etch their
own onezie-twozie PC board on the kitchen table, because they WANT to.
Saying no RF engineer would take a prototype out into the field is
exactly what hams do several times a year for the host of QRP To The
Field type contests. They take a lickin' and keep on tickin'.

If hams only designed and built things that made perfect sense and with good engineering practices, there would be no Tuna Tin 2 -hi.

72, Paul NA5N

Date: Thu, 07 Mar 2002 16:17:49
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: dafouchey@comcast.net
Cc: qrp-1@lehigh.edu
Subject: [121502] Re: PCB etchant
Message-ID: <F995vleIpLBetopEFGy0000a9fb@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: Dave Fouchey <dafouchey@comcast.net>
>So would a common 20D nail do for the electrode then?

Sounds like a good source of iron to me.

Brad

P.S. I'm not endorsing this whole idea, BTW. Actually, I wonder just how well the "copper" really plates out of solution. It would seem to me that you would want to accomplish two things, 1) make sure that the acidity is brought back to original levels and 2) the concentration of ferric ions is replenished. This mixture of acid and ferric ion does not simply work by metal replacement it is an oxidizing reagent. Any copper that might be liberated at the cathode would be expected to be immediately attacked by the etchant and brought back into solution. So it would be like a dog chasing its tail.

Join the world's largest e-mail service with MSN Hotmail.
<http://www.hotmail.com>

Date: Thu, 07 Mar 2002 11:30:07 -0500
From: "Randy Randall" <randallr@Healthall.com>

To: <qrp-1@Lehigh.EDU>
Subject: [121503] Re: Ten Tec 505, 509, 515
Message-ID: <sc874f48.035@healthall.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline

Hello. I am looking to purchase one of these rigs and was wondering your =
opinion of them. Which of the three would be the better radio, most bang =
for the buck, and what were the differences between the models. I have =
heard about the PTO rebuild problem.
Please reply off list.

Thank you,
Randy KB8ASO

p.s. If you have one you wuld like to sell, drop me a line off list.

Date: Thu, 7 Mar 2002 11:32:41 -0500
From: "DIANNE M WISE" <roy537@prodigy.net>
To: <k5xu@netdoor.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [121504] Re: More Hidden Antenna Thoughts
Message-ID: <00fb01c1c5f5\$b49668a0\$7597ff3f@rcrosier>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Great Story!!!

There is also the story that was in one of the major radio publications
about 15 years ago. Seems a ham moved into a new apartment house and
immediately began stringing wire out the back window and across the parking
area below. A pesky middle school kid kept bothering him, asking too many
questions and reporting all wiring events to his mother. Eventually the ham
told the kid that he had been chased out of all his previous apartments by
aliens in flying saucers. He had discovered that putting up real small
wires messed up the alien's tracking devices and they had stopped bothering
him ever since. The child duly reported this to his mother and she banned
the child from talking with or shadowing the ham forever more!

I know that a case might be made that the ham should have recruited and
Elmered the lad into the service/hobby, but keeping imagined RFI complaints
to a minimum was his goal.

Roy KE0UQ

----- Original Message -----

From: "Mike Duke, K5XU" <k5xu@netdoor.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Wednesday, March 06, 2002 7:21 PM

Subject: More Hidden Antenna Thoughts

> "Terrorist preparedness" is to me, if anything, a good reason to maintain
a
> "radio to go" system.
>
> If you remember the Falkland Islands war, you may also remember the story
of
> the amateur who transported his Atlas 210X and a 15 meter dipole from
house
> to house in order to maintain contact with England until the troops could
> arrive to protect the islands.
>
> When operating with a hidden antenna, you must use good sense, be ready to
> really hide it by removing it quickly, and expect to encounter people who
> (especially if they do not have the authority to do so) will attempt to
> bully you into removing it.
>
> I have operated with attic, or low-profile outdoor wires for 20 years, and
> am convinced that qrp beats the heck out of qrt any day.
>
> Only once thus far have I had to call someone's bluff. Once a down-stairs
> neighbor who had a reputation of making trouble for everyone else in the
> building called the local cable company to my house to order me to "stop
> using that CB radio."
>
> I took the gentleman's name, then called his boss and the cable engineer.
> The result was that the company spent three days in my complex, removed a
> dozen or so improper installations, and really cleaned up the system.
>
> Of course, whenever the neighbor's TV lost the signal any time after that,
> whether I was home or not, we played tattle tales with the cable company.
>
> I also knew what she didn't. This was the early 90's during the "do
nothing"
> days of the FCC before Mr. Hollingsworth. So, whenever she threatened to
> call the FCC, I simply gave her the number for the New Orleans office.
That
> would really send her up the wall!
>
> When I finally moved from that complex, she had great fun telling everyone

> that she had me evicted. I figured that since I had enjoyed my hobby
despite
> her, she was entitled to a little fun of her own.
>
>
>
>

Date: Thu, 7 Mar 2002 08:36:41 -0800
From: "Dave Fifield" <dave@redhotradio.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121505] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <001901c1c5f6\$431152c0\$0200a8c0@AD6A>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I know one!

72, Dave, AD6A

----- Original Message -----
From: "Bruce Muscolino" <w6toy@erols.com>
Subject: Re: Pc Boards Got em ! but No Knowledge

> How many designers do you know who would etch a PC card to
> build a prototype?

Date: Thu, 07 Mar 2002 08:38:29 -0700
From: "wd7y@pyramid.net" <wd7y@pyramid.net>
To: QRP-L Members Talk <qrp-l@lehigh.edu>
Subject: [121506] FS Vertical Antenna
Message-ID: <B8ACD785.6F47%wd7y@pyramid.net>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Hy-Gain AV-620 6 Band Vertical Antenna
Bands 6,10, 12, 15, 17, and 20 meters.

Can work well with a tuner on 40 meters.
In good working condition.

3/8 wavelength O/A Length 25 Ft. A good roof mount vertical.
Radiation Angle at 1/4 Wavelength high 16 degrees.
No radials or traps. Power Handling 5000 Watts.
Wind survival 80 MPH. I use guys for extra support.
Low-Profile. Automatic Band switching.
Manual included.
Buyer to pay shipping.

Selling price \$270.00
Asking price \$120.00

Date: Thu, 07 Mar 2002 11:36:57 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: "Paul Harden, NA5N" <na5n@rt66.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [121507] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <3C879729.207BD9D2@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

We agree on one point, this is a HOBBY. Where does it say that we should make it more complicated than it already is? I have been in the hobby for 48 some years, and have done most things.

I have built extensively, from kit and also done my own designs. I have always looked for the easiest way to build something first! I am an engineer first and foremost, my job is to make things easier.

I have used and etched many PC boards both here at home, and at work. I have applied different standards to hobby things than I do to work things. Most everything I have built has worked, sometimes two or more boards are required if I forgot something didn't think the design through. At work I had the luxury of checkers to review my work! Here I work alone!

I understand that you review everything I say looking for errors. I thank you for that, but I do wish you would not be so quick to assume what I have said is what you mean! Your experience is different, you look at things like someone who wants to produce something in quantity. I look at things as one who wants to build one of something!

Date: Thu, 07 Mar 2002 11:47:41 -0500
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [121508] Re: PCB etchant
Message-ID: <5.1.0.14.1.20020307114158.00a72060@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 04:17 PM 3/7/2002 +0000, you wrote:

>P.S. I'm not endorsing this whole idea, BTW. Actually, I wonder just how
>well the "copper" really plates out of solution. It would seem to me that
>you would want to accomplish two things, 1) make sure that the acidity is
>brought back to original levels and 2) the concentration of ferric ions is
>replenished. This mixture of acid and ferric ion does not simply work by
>metal replacement it is an oxidizing reagent. Any copper that might be
>liberated at the cathode would be expected to be immediately attacked by
>the etchant and brought back into solution. So it would be like a dog
>chasing its tail.

Or a government cutting taxes? (Sorry, I couldn't "resist.") (Somebody stop me! Please!)

On a slightly more serious note - what about a reverse electroplating process? Using a board masked with resist as an electrode in a copper plating bath, only using the current to erode the copper from the unmasked board. Would that work?

Dave

"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton
Dave Hinerman
WD8CIV@worldnet.att.net

Date: Thu, 07 Mar 2002 16:44:07 +0000
From: Chuck Adams <k7qo@earthlink.net>

To: qrp-1@lehigh.edu
Subject: [121509] Harbor Freight Hand Punch
Message-ID: <5.1.0.14.0.20020307163405.009e88f0@mail.earthlink.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Gang,

Aperiodically I get email referring to my web site and the Manhattan Style building pages. And the most asked question is what to do about the hand punch that was discontinued by Harbor Freight with the part number that I have there on the page.

On Wednesday I was in Phoenix and stopped at Harbor Freight to check out what they had that I needed or had my name on it. :-)

They have a hand punch Item Number 44060 that sells for under \$20 US currency. It is made in China and is the exact replacement for the hand punch that they had previously. The old hand punch was made in Taiwan and both have the same moment arms and require about the same pressure to punch pads out of PC board material or to punch pads out of brass sheet stock. The brass circles I use to silver solder to AA NiMH batteries that I get each year at Tuthill for \$1 each but do not have the button on the + end. Works great.

The punches are the same size and I made the mod of removing the point on the punch that holds the material in place while punching. I find that the point damages the pads on the opposite side and makes them convex in shape that I don't care for.

I will attempt to update the web page with this information some time soon but thought this information might be of use to those that are interested in trying Manhattan building. Especially if there is a building contest at Dayton this year.

I tried both the old punch and the new punch on some PC board material that comes with the NJQRP Manhattan board kit and I get the same excellent results. There any number of pages on the web now with ideas and schematics for building Manhattan Style.

FYI,

Chuck Adams, K7QO CP-60 k7qo@earthlink.net
<http://www.qsl.net/k7qo>

Moving to Arizona? --- Bring your own water, please.

Date: Thu, 07 Mar 2002 12:10:25 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: dave@redhotradio.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [121510] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <3C879F01.7721D56B@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave.

>

> I know one!

>

Of course you do. Everyone knows one. Was it for a simple project or a complex one? Did it involve RF or just audio and digital? How many iterations were required to settle on a board that worked? Believe it or not, I have also done it, but it was for a hobby board where if I had to scrap it and start over it didn't make any difference!

Date: Thu, 7 Mar 2002 12:22:18 EST
From: N4SKS@cs.com
To: qrp-l@lehigh.edu
Subject: [121511] FS QRP , info on old QQ's etc.
Message-ID: <90.2255fa03.29b8fbca@cs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hello;

In an attempt to clean out before moving I would like to offer the following items

Ten Tec 1340 qrp xcvr 40 mtrs very good condx\$73
shipped

PARTS a lot of variable caps. all new sealed in bag or original boxes
Johnson (2) 3.5-27 pf , (1) 5-22 pf, (1) 5-12pf, (1) 5-80pf

centralab trimmers NIB 4-30 pf quan 4
.....\$13.00 shipped

Please look on Ebay for my QRP magazine collections going back to the 1960's

73 Les K4NK

Date: Thu, 7 Mar 2002 12:55:24 -0500
From: Bill Coleman <aa4lr@arrl.net>
To: <n1bq_list@wulfden.org>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121512] RE: Keyer question - Slow Vs Fast Keying - comment
Message-ID: <20020307175647.YZC10439.imf00bis.bellsouth.net@[192.168.0.21]>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 3/3/02 11:06 AM, Brian B. Riley (N1BQ) ListAcct at
n1bq_list@wulfden.org wrote:

>Excuse me for being ignorant here , but was is the point of even sending it,
>if it is always 5NN??

Oh, that's easy! They send it because the contest rules require a report
to be sent.

>Seems to me that the current process has been
>compromised. Too bad if its slows down their automatic loggers.

Sending 599 for every contact long pre-dates automatic loggers.
Contesters have been doing this for several decades.

>If it takes
>longer to log a validly sent RST report then so be it. That more accurately
>reflects the process.

I'm not sure the contest judges for contests that require an RST actually
require it to be correct. I'm fairly sure it isn't a requirement for CQWW.

You might ask -- why send it? Well, because that's what's in the rules,
and to change the rules would affect the meaning of all the existing
records.

>I am not so sure I will ever be quick/good enough to copy code in a contest
>at this level ... so I guess this is just an academic observation ...

There are plenty of fun contests that don't send an RST at all.

The North American QSO Party happens twice a year and the exchange is nothing more than name and state/province/country. 12 hours of low-power (or QRP) contesting fun!

The ARRL Sweepstakes has a really long exchange, but no RST in sight. That's another fun one.

The ARRL Field Day isn't a contest (it's an operating event -- but we keep score anyway), but it also doesn't have RST.

You can have lots of fun in any of these contests (or operating events) even if you don't copy super-speed code. You'll usually find the slower speed guys higher in the band.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Thu, 7 Mar 2002 12:58:27 -0500
From: Bill Coleman <aa4lr@arrl.net>
To: <n1bq_list@wulfdcn.org>,
 "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [121513] RE: Keyer question - Slow Vs Fast Keying - comment
Message-ID: <20020307175949.F0I026356.imf17bis.bellsouth.net@[192.168.0.21]>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

On 3/3/02 9:42 PM, Brian B. Riley (N1BQ) ListAcct at
n1bq_list@wulfdcn.org wrote:

>I am all too well aware of the RST report being a 'guide point.' In the few
>CW contests in which I have operated, the sound of "didahdit-dididit-dah"
>followed by a number set, usually 559, 599, or 5NN, is what gets me setup to
>grab the rest ... I probably can copy contest exchanges at about 5-7 wpm
>higher than my ragchew speed because of this ... as you said ...

Any contester who actually sends "RST" before the report is probably
losing....

> ... OK down off my little soapbar wrapper ... cheers ... brian, n1bq

Hey, the "nonsense" of 599 for everyone has long ago worn out that
soapbox.

Bill Coleman, AA4LR, PP-ASEL Mail: aa4lr@arrl.net
Quote: "Not within a thousand years will man ever fly!"
 -- Wilbur Wright, 1901

Date: Thu, 07 Mar 2002 13:12:20 -0500
From: Paul Womble <pwomble1@tampabay.rr.com>
To: FP List <fpqrp-l@mpna.com>, QRP-L <qrp-l@lehigh.edu>
Subject: [121514] Truffle Hunt Tonight: Be there or be square!
Message-ID: <3C87AD84.14DC4C00@tampabay.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Look for K4FB tonight somewhere between 7040-7050 at 0130z. I'll be listening .5 above or below my transmit frequency, so spread out a bit.

The RIT will be getting a workout, so the best tactic would be to keep calling on the same frequency. Trying to call on the frequency of the last station worked will be an exercise in frustration, because I will NOT be listening there ;-)

My goal is 40 qso's in the log, so please stop by and help me with this.

73
Paul K4FB

Date: Thu, 7 Mar 2002 13:06:56 -0500
From: "McCloskey, Anthony" <AMcCloskey@mail.intracorp.com>
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [121515] qrp tuner design with audible indication
Message-ID: <7783BA7337A032488E5F4D29DAB9F5C9CBB017@brwexu01.intracorp.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gary:

Since you are looking for a relative reading, here are a couple of ideas that I have used to solve the problem. For tuners using an led as an indicator, I have used a photo cell driving a one transistor oscillator. As the intensity of the led increases, the pitch of the oscillator increases and as the intensity decreases, the pitch goes down. With this method, you

don't have to make any connections to the inside of the tuner.
Also, in QSt for march 1997, I wrote an article for a relative reading
audible indicator which you can connect across any standard meter, and it
should work well on almost any available tuner using a standard meter.
If you need any more information please contact me.

Tony McCloskey, WA3CA0

Date: Thu, 7 Mar 2002 10:28:51 -0500
From: "Tracy Markham" <tracy@bytemark.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [121516] QRP and Project mags
Message-ID: <NFBBKLDHALEHCJMAJPKFMEKECMAA.tracy@bytemark.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="Windows-1252"
Content-Transfer-Encoding: 7bit

I want to start getting some of the publications you guys talk about on
here.

Please reply off list, but what periodicals would you suggest? I want 'em
all!

Tracy N4LGH

Date: Thu, 07 Mar 2002 10:23:05 -0800
From: Russ Carpenter <russ@natworld.com>
To: QRP-L List <qrp-l@lehigh.edu>
Subject: [121517] Results of the MARCH SPARTAN SPRINT
Message-ID: <B8ACF008.D4C4%russ@natworld.com>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

The March Spartan Sprint was a record setter. A veritable flood of sprinters
issued a joyful bedlam of peanut whistle signals, showing once again that
the little guys have more fun. Among the many notable features: NC7W snagged
123 Qs, K0EVZ contacted 54 sprinters with a station that weighed .56 pounds,
and AB6QR reeled in 10 contacts with a 10 mW signal!

Each contact received one point. If you didn't tell us the weight of your station, or if your station weighed more than the Andromeda Galaxy, we assigned a weight of 30 pounds.

The soapbox has been published separately in the March issue of The ARS Sojourner. Don't miss it! <http://www.natworld.com/ars>

THE SKINNY DIVISION (results sorted in the order of points per pound)

Call	Name	80m	40m	20m	15m	10m	Total Points	Wt.	Points/ Pound
K0EVZ	Doc	0	0	54	0	0	54	.56	96.43
W0CH	David	0	0	35	0	0	35	1.12	31.25
N2CQ	Ken	0	28	27	5	0	60	2.3	26.09
W0PWE	Jerry	0	0	24	0	0	24	1.29	18.60
WB8RTJ	Jim	0	18	30	0	0	48	2.8	17.14
N3AO	Carteer	0	21	19	0	0	40	2.5	16.00
K4GT	Jim	0	3	20	0	0	23	2	11.50
K04WX	Mike	0	11	10	0	0	21	2	10.50
KF0N	Larry	0	0	20	0	0	20	2	10.00
KB9LCK	Chris	3	6	6	0	0	15	1.5	10.00
KI0II	Ron	0	8	22	0	0	30	3.2	9.38
KH6B	Dean	0	3	26	10	2	41	4.5	9.11
WA2IAC	Gregg	5	9	3	0	0	17	2	8.50
N0TK	Dan	0	23	19	0	0	42	5	8.40
W1PID	Jim	0	5	9	0	0	14	1.7	8.24
KQ6NO	Rick	0	0	11	0	0	11	1.37	8.03
WB6BWZ	Matt	0	10	9	2	0	21	2.7	7.78
WB6HQB	Bart	0	2	18	0	0	20	2.6	7.69
AE6N	Jim	0	0	14	0	0	14	1.9	7.37
AD6YU	Loren	0	0	6	0	0	6	.82	7.32
W4NJK	Charlie	0	3	14	3	0	20	3	6.67
K5HWT	Morg	0	5	0	0	0	5	1	5.00
K4AVX	John	0	10	0	0	0	10	2	5.00
WA4DOU	Roy	0	24	0	0	0	24	5	4.80
NC7W	Dave	0	36	75	12	0	123	30	4.10
KB7MBI	Alan	0	6	14	8	0	28	7	4.00
W0UFO	Mert	0	36	32	0	0	68	20	3.40
W8HL	Randy	0	5	3	0	0	8	2.4	3.33
KW4JS	John	3	7	13	0	0	23	7	3.29
N8WE	Glen	0	0	11	0	0	11	3.5	3.14
W3ERU	Wes	0	14	0	0	0	14	4.5	3.11
N0IBT	Dave	0	0	13	0	0	13	4.5	2.89
AA7QU	Russ	0	22	62	2	0	86	30	2.87
W2BVH	Lenny	2	9	6	3	0	20	7	2.86
K07X	Alan	2	53	24	5	1	85	30	2.83
K7PX	Steve	0	3	11	0	0	14	5	2.80

N7RVD	Brian	0	4	12	0	0	16	6	2.67
NC90	Skip	0	9	6	0	0	15	6	2.50
K7RE	Brian	0	24	39	11	0	74	30	2.47
K4TJD	Tom	0	10	12	3	0	25	12	2.08
AB6QR	Dennis	0	0	10	0	0	10	5	2.00
KD5LX	Bob	2	17	5	0	0	24	12.5	1.92
W9FNB	Gary	0	0	8	5	0	13	7	1.86
K3TW	Tom	9	38	7	0	0	54	30	1.80
M3VKM	Rickl	0	0	7	0	0	7	4	1.75
N0RC	Rod	0	18	29	5	0	52	30	1.73
WA8NTA	Dick	0	17	31	0	0	48	30	1.60
W7WIK	Marco	0	13	29	0	0	42	30	1.40
KA7SOL	Ian	0	3	14	2	1	20	15	1.33
W5YR	George	0	24	14	0	0	38	30	1.27
K7NM	Lee	0	0	33	0	0	33	30	1.10
KA8LLE	Ben	8	8	8	0	0	24	28	0.86
K6PZB	John	0	1	9	1	1	12	15	0.80
K3AS	Bill	2	4	11	3	0	20	30	0.67
AC5K	Wes	0	7	13	0	0	20	30	0.67
NK0E	David	0	15	5	0	0	20	30	0.67
KD0RC	Len	0	10	5	1	0	16	30	0.53
VE3XT	Bill	0	16	0	0	0	16	30	0.53
N4UY	Jake	0	16	0	0	0	16	30	0.53
NK9G	Rick	0	1	15	0	0	16	30	0.53
N5WL	Bart	0	4	9	0	0	13	30	0.43
K4BX	Bill	2	4	4	2	0	12	30	0.40
KI7N	Mark	0	0	8	0	0	8	20	0.40
WF6D	Bill	0	2	6	3	0	11	30	0.37
K06Z	Herb	0	4	7	0	0	11	30	0.37
W4GFA	George	0	0	9	0	0	9	30	0.30
K5IS	Jerome	0	0	0	7	0	7	30	0.23
K8PZ	Steve	0	0	6	0	0	6	30	0.20

THE TUBBY DIVISION (results sorted in the order of points)

Call	Name	80m	40m	20m	15m	10m	Total Points
NC7W	Dave	0	36	75	12	0	123
AA7QU	Russ	0	22	62	2	0	86
K07X	Alan	2	53	24	5	1	85
K7RE	Brian	0	24	39	11	0	74
W0UFO	Mert	0	36	32	0	0	68
N2CQ	Ken	0	28	27	5	0	60
K0EVZ	Doc	0	0	54	0	0	54
K3TW	Tom	9	38	7	0	0	54
N0RC	Rod	0	18	29	5	0	52
WA8NTA	Dick	0	17	31	0	0	48

WB8RTJ	Jim	0	18	30	0	0	48
W7WIK	Marco	0	13	29	0	0	42
N0TK	Dan	0	23	19	0	0	42
KH6B	Dean	0	3	26	10	2	41
N3AO	Carteer	0	21	19	0	0	40
W5YR	George	0	24	14	0	0	38
W0CH	David	0	0	35	0	0	35
K7NM	Lee	0	0	33	0	0	33
KI0II	Ron	0	8	22	0	0	30
KB7MBI	Alan	0	6	14	8	0	28
K4TJD	Tom	0	10	12	3	0	25
WA4DOU	Roy	0	24	0	0	0	24
W0PWE	Jerry	0	0	24	0	0	24
KA8LLE	Ben	8	8	8	0	0	24
KD5LX	Bob	2	17	5	0	0	24
KW4JS	John	3	7	13	0	0	23
K4GT	Jim	0	3	20	0	0	23
K04WX	Mike	0	11	10	0	0	21
WB6BWZ	Matt	0	10	9	2	0	21
KF0N	Larry	0	0	20	0	0	20
KA7SOL	Ian	0	3	14	2	1	20
W4NJK	Charlie	0	3	14	3	0	20
W2BVH	Lenny	2	9	6	3	0	20
WB6HQK	Bart	0	2	18	0	0	20
K3AS	Bill	2	4	11	3	0	20
AC5K	Wes	0	7	13	0	0	20
NK0E	David	0	15	5	0	0	20
WA2IAC	Gregg	5	9	3	0	0	17
KD0RC	Len	0	10	5	1	0	16
VE3XT	Bill	0	16	0	0	0	16
N4UY	Jake	0	16	0	0	0	16
N7RVD	Brian	0	4	12	0	0	16
NK9G	Rick	0	1	15	0	0	16
NC90	Skip	0	9	6	0	0	15
KB9LCK	Chris	3	6	6	0	0	15
W1PID	Jim	0	5	9	0	0	14
W3ERU	Wes	0	14	0	0	0	14
AE6N	Jim	0	0	14	0	0	14
K7PX	Steve	0	3	11	0	0	14
N0IBT	Dave	0	0	13	0	0	13
N5WL	Bart	0	4	9	0	0	13
W9FNB	Gary	0	0	8	5	0	13
K6PZB	John	0	1	9	1	1	12
K4BX	Bill	2	4	4	2	0	12
WF6D	Bill	0	2	6	3	0	11
K06Z	Herb	0	4	7	0	0	11
KQ6NO	Rick	0	0	11	0	0	11
N8WE	Glen	0	0	11	0	0	11

AB6QR	Dennis	0	0	10	0	0	10
K4AVX	John	0	10	0	0	0	10
W4GFA	George	0	0	9	0	0	9
W8HL	Randy	0	5	3	0	0	8
KI7N	Mark	0	0	8	0	0	8
M3VKM	Rickl	0	0	7	0	0	7
K5IS	Jerome	0	0	0	7	0	7
K8PZ	Steve	0	0	6	0	0	6
AD6YU	Loren	0	0	6	0	0	6
K5HWT	Morg	0	5	0	0	0	5

Thanks for supporting The Adventure Radio Society

Russ Carpenter, AA7QU
Contest Manager

Date: Thu, 07 Mar 2002 14:05:35 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [121518] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <3.0.6.32.20020307140535.007a6860@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Once you get set up to make circuit boards and become proficient at using the layout software, you can churn out a board in a few hours, start to finish. Well, at least simple ones. Getting a computer, laser printer and finding out about PnP Blue film opened up a whole new world for me.

I don't like Manhattan style, simply because it's too time consuming. Those that take the time to think it out and do neat work end up with a real piece of art though. If I don't know if a circuit will work or want to experiment, I use basic ugly style. It's quick and easy to make changes. Once the circuit works, and is something I want to keep around, then I'll make a board. Sometimes I go 50-50. I'll layout the part of the circuit I know works, then leave enough blank board to do the rest ugly style.

72,
Steve, KD1JV
"Melt Solder"
White Mountains of New Hampshire
<http://www.qsl.net/kd1jv/>

Date: Thu, 7 Mar 2002 14:31:17 -0500
From: "carl seyersdahl" <carlseye@tampabay.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [121519] pcb programs
Message-ID: <000b01c1c60e\$a6d986c0\$29221c18@tampabay.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I recently downloaded a program called Eagle and was trying to get it to work. after buying a new computer and having all my files transferred, the Eagle program no longer worked. I was trying to learn to make some small pcb's for radios and such. E-mails from the the cadsoft people attempted to tell me how to get it to go again as a freeware program but nothing worked so I have "uninstalled " the whole program!! does anyone know of a freeware program that works without me having to be a genius?? (i'm not quite that far yet..)

carl / kz5ca

Date: Thu, 07 Mar 2002 14:28:14 -0600
From: "George, W5YR" <w5yr@att.net>
To: "qrp-1@Lehigh.edu" <qrp-1@Lehigh.edu>
Subject: [121520] Johnson KW Matchbox
Message-ID: <3C87CD5E.766CC60A@att.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Since casually mentioning in a recent posting that I have a Johnson KW Matchbox, I have received numerous inquiries as to condition, availability, price, etc.

I really haven't given any thought to actually selling or trading the unit - I just picked it up since it was in such remarkable condition. So, I really have no idea what they are worth these days.

For now, let me just say that the unit is complete with the panel meter but lacks the remote SWR sensor, which was a separate unit to the tuner, not an integral part. I have the factory documentation, and to my knowledge the tuner has not been modified in any manner. A KW tuner on a QRP rig seems a

little out of proportion, but with the size and quality of those "big" components, the losses should be quite low, and "no baluns required" for ladderline. And it does have a coax output connector. You should know that these tuners cover only 80, 40, 20, 15 and 10 meters - no WARC bands.

So, let me take the covers off and make sure that everything inside is as it should be and then I'll invite folks to make private bids on it (private off-list emails only) in order to see how the market looks. I do not want any part of Ebay so I will be guided by my fellow amateurs' judgement. In connection with that, anyone with knowledge of the worth or value of the unit is encouraged to contact me in private, even if they are not interested in acquiring it. Right now I mainly need a reliable appraisal figure.

I greatly prefer that all subsequent correspondence on this be conducted by private email, after I inspect the unit and announce that it is available. I do not think that QRP-L is the proper forum for an auction . . .

Many thanks for the interest, guys! <:}

--

72/73/00, George W5YR - the Yellow Rose of Texas
Fairview, TX 30 mi NE of Dallas in Collin county EM13qe
Amateur Radio W5YR, in the 56th year and it just keeps getting better!
QRP-L 1373 NETXQRP 6 SOC 262 COG 8 FPQRP 404 TEN-X 11771 I-LINK 11735
Icom IC-756PRO #02121 Kachina #91900556 IC-765 #02437

All outgoing email virus-checked by Norton Anti-Virus 2002

Date: Thu, 7 Mar 2002 15:38:51 -0500
From: "ZOOM" <kandrparker@sympatico.ca>
To: <carlseye@tampabay.rr.com>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121521] Re: pcb programs
Message-ID: <012701c1c618\$1772d180\$99a4fea9@robertpa>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Yes it's called windows paint.
See this site on how to use windows paint for PCB.
BTW: Windows paint comes with all windows installations of their OS.
<http://pmp3.net/harry/>
Goto the menu item entitled Draw cctss/PCB.

Regards,
Robert
VE3RPF

----- Original Message -----

From: carl seyersdahl <carlseye@tampabay.rr.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Sent: Thursday, March 07, 2002 2:31 PM
Subject: pcb programs

> I recently downloaded a program called Eagle and was trying to get it to
> work. after buying a new computer and having all my files transferred, the
> Eagle program no longer worked. I was trying to learn to make some small
> pcb's for radios and such. E-mails from the the cadsoft people attempted
to
> tell me how to get it to go again as a freeware program but nothing worked
> so I have "uninstalled " the whole program!! does anyone know of a
freeware
> program that works without me having to be a genius?? (i'm not quite that
> far yet..)
> carl / kz5ca
>
>

Date: Thu, 07 Mar 2002 20:43:19 +0000
From: k8cz@att.net
To: k8cz@att.net
Cc: fpqrp-l@mpna.com (The Pigs!), qrp-l@Lehigh.EDU (QRP-L),
njqrp@njqrp.org (NJQRP)
Subject: [121522] Re: [fpqrp] Truffle 3/5/2002
Message-ID:
<20020307204320.RWZS13933.mtiwmhc22.worldnet.att.net@webmail.worldnet.att.net>

I didn't get any corrections to the list from Tuesday
night, so this is the final count.

--

73,72, 00

FP #41 NJQRP #338 Fists #2360

ARCI #9606 SOC #336 Norcal ARRL

Hamilton, Ohio EM79ri

Tom, K8CZ

>

> Rig here was a Yaesu FT 817 running 5 watts to a ground

> mounted vertical. Not the best of antennae, but
> adequate to net me 40 states and 54 DX countries since
> the first of the year.
>
> Here is what I heard.
>
> W5TB 559 TX DOC 5W
> W5YR 559 TX GEORGE 5W
> WU9N 559 WI FER0Z 5W
> W9HL 559 IL RANDY 5W
> AF4PS 559 FL MAC 3W
> K8CV 559 MI WALT 5W
> W5USJ 559 TX CHUCK 5W
> WA9TZE 559 WI JIM 5W
> K4BYF 559 FL JACK 5W
> K5SR 559 TX DALE 5W
> K0EVZ 559 ND DOC 5W
> K5JHP 559 TX BILL 5W
> K5DW 559 TX DON 5W
> KC9LC 559 VA RANDY 5W
> WE9K 599 WI GLENN 5W
> N1TP 579 FL TOM 5W
> W0RSP 559 SD ADE 2W GOOD SIG
> WA8BXN 589 OH MIKE 5W
>
> 18 OF Y'ALL. Even operating split, at times there were
> so many I couldn't make out a call. Jolly good show
> gang.
>
> TU es oink-oink. Thanks for the new state Ade.
>
> --
> 73,72, 00
> FP #41 NJQRP #338 Fists #2360
> ARCI #9606 SOC #336 Norcal ARRL
> Hamilton, Ohio EM79ri
> Tom, K8CZ
> -To unsubscribe, mail to majordomo@fpqrp.com, msg: unsubscribe fpqrp-l -

Date: Thu, 07 Mar 2002 15:53:33 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: carlseye@tampabay.rr.com
Cc: qrp-l@lehigh.edu
Subject: [121523] Re: pcb programs
Message-ID: <3.0.6.32.20020307155333.007a9b50@mailhost.ncia.net>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

> does anyone know of a freeware
> program that works without me having to be a genius??

Carl,

Give Circad a try. <http://www.holophase.com>

I still prefer the DOS version, but the Win98 version works in a very similar way and is pretty good. I think you'll find Circad a lot easier to learn and use than Eagle. There are no limitations to board size or number of pins or any of that nonsense. Only limitation is exporting files to another format or making Gerber files. For hobby use just printing to toner transfer film it works great.

I like the way the windows version retains the look and feel of the dos version. All the two letter keyboard commands work, they don't clutter the screen with a lot of buttons - they retain the dos pull down menu technique, so nearly the whole screen is used for your drawing window, not just a little corner of it. They claim, "written by and for real engineers", so the way it works actually makes sense!

72,

Steve, KD1JV

"Melt Solder"

White Mountains of New Hampshire

<http://www.qsl.net/kd1jv/>

Date: Thu, 7 Mar 2002 15:48:52 EST
From: N4SKS@cs.com
To: qrp-1@lehigh.edu
Subject: [121524] MORE FS , es whats gone
Message-ID: <47.195994c1.29b92c34@cs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Really starting to dig in now :

Cubex Cast Aluminum Quad Spiders quantity of 2 good condx for heavy
boom

\$30.00 for both plus

\$10.00 shipping

Pamona mini boxes Quan of 3 like new model 3751 with bncls on ends
perfect for QRP band pass filters nice blue pamona color\$ 13.00
shipped

Ten Tec KR-5 electronic keyer , poor looking condx. good project, untested
just as I got it 2 years ago at a ham fest
.....\$14.00 shipped

Thank You (more coming , moving sale) 73 Les K4NK

Date: Thu, 7 Mar 2002 15:53:29 EST
From: N4SKS@cs.com
To: qrp-l@lehigh.edu
Subject: [121525] sri RE; whats gone
Message-ID: <b6.7b1afc1.29b92d49@cs.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Sorry forgot to list whats gone.

Variable caps are gone .
the MS-15 and the MS-30 are both gone
The Cascade kit is gone
Thanks to all who are making my moving day easier.

Les K4NK

Date: Thu, 7 Mar 2002 15:53:58 -0500
From: "John Dorson" <jdorson@Worldshare.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [121526] portable vertical antenna
Message-ID: <002001c1c61a\$389ac140\$7892f4d1@atwork>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I am looking to build a portable vertical antenna using a base loaded coil
and one of Radio Shacks collapsible 72" replacement rods. I am going on a
cruise later this year and will have an outside room with a balcony. My
thinking is to strap the antenna to the railing. The antenna would be
adjusted by rod on top. Would like to be able to operate 30 and 20 meters.
Not sure where to start on building the coil portion.

Any advise/comments would be greatly appreciated.

Thanks.

John K2JHU...
jdorson@worldshare.net

Date: Thu, 7 Mar 2002 16:00:57 -0500
From: nilsbull@juno.com
To: QRP-L@lehigh.edu
Subject: [121527] The TDA1072 Story
Message-ID: <20020307.160648.-153147.1.nilsbull@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,

I had to scram all my email stuff a while back 'cause I got weird messages telling me I'd sent messages that I never sent. Which is another story. So . . . whoever it was that was interested in the TDA1072 chips, I now have 10 of 'em.

Two I'm keepin' for myself.

The rest is for whoever wants 'em, at \$3.00 each.

And I'll remember next time not to get 'em from Match-A-Knob Electronics. They sent 'em in a brown envelope with a 57 cent metered mail sticker on the envelope. They charged me \$3.12 each + \$10 air post & handling. A lot of handling too. They were all in a bag. A little Zip-lock bag. No foam, no anti-static. Four of 'em had bent pins holdin' 'em to other ones with bent pins.

I'll straighten the pins for free.

And now that I've finally come to my senses about all this radio building stuff . . . including the JenMat proto board suggestion that I got (see how much I pay attention? I can't even remember who suggested that). The tiny radios in a box program has been put on hold by the \$200 worth of solid state amplifier that I've finally gotten tired of blowing up, which is another story.

Anyway, who wants a couple of these little radio chippie thingies? I can't remember.

73

Nils

Nils R. Bull Young -- El Gringo Errante --
La Estancia de los Guajolotes Sonrientes -- W8IJN --
<http://w8ijn.tripod.com>
"The island is closer than your memories are." -- Ian G. Bull Young, 11
Feb 2002

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<http://dl.www.juno.com/get/web/>.

Date: Thu, 07 Mar 2002 21:15:26 +0000
From: Larry Cahoon <lejek@erols.com>
To: w6toy@erols.com,
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [121528] Re: More on the 'Miracle Whip'
Message-ID: <5.1.0.14.0.20020307211150.00b7ede0@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

>

>However, I must note that contacts of 500 to 2000 miles are easy to do
>on 80 meters, if you look at the right time of the evening!

I see I must have confused you using metric measurements. What I said was
the measurements were made at 80 meters - that is at a distance of 80
meters from the transmitter. They did the shoot out on 20 meters, not on
80 meters. And I agree at the right time of night 80 meters can be a great
band for 2000 mile plus QSOs. It must be after all I've worked New Zealand
there - at 100 watts.

73 de Larry.....WD3P in MD
<http://www.qsl.net/wd3p/>

Date: Thu, 7 Mar 2002 16:22:59 -0500
From: "Fancher, Mark (GEAE)" <Mark.Fancher@ae.ge.com>
To: "'jhisson1@columbus.rr.com'" <jhisson1@columbus.rr.com>
Cc: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [121529] RE: Dipoles, Windoms, Loops, oh my!
Message-ID: <F9351DA9F0F6D41187410090277B3EB304D5FCD4@ev008msxaege.ae.ge.com>

Try modeling it in EZNEC.

If you plan on working on the low bands mostly, you may be hard pressed to find a difference between any of these at that height. On the higher bands, you probably will get more directivity/gain than the trapped dipole.

Mark, AA4MF

-----Original Message-----

From: Jason Hissong [mailto:jhisson1@columbus.rr.com]

Sent: Thursday, March 07, 2002 9:03 AM

To: Low Power Amateur Radio Discussion

Subject: Dipoles, Windoms, Loops, oh my!

Hi guys,

Spring is coming and I have been contemplating upgrading/replacing the Alpha Delta DXLB+. The candidates are a Carolina Windom 40 (yea, the one the broke the record), the Super Loop 40, or building a Skyloop. Question is, which is better? I have heard that the Superloop (or loops in general) are less noisy than dipoles. I have also heard that the Windom does great as a DX antenna. Comments? I cannot put a tower up (not because of CCR's, my town is very nice about towers, but because of \$\$\$\$). Will I notice any difference between the dipole I have now, and one of the antennas mentioned above? I have about 70' between two trees to play with and about 55' between a mast that I installed (about 6 feet) and one of the trees. The antenna will be installed about 40 feet. The DXLB+ is a trapped dipole.

Thanks es 73

Jason

N8XE

K2 #1270 looking for a new antenna

Date: Thu, 07 Mar 2002 16:40:05 -0500

From: <winjones@ix.netcom.com>

To: k7qo@earthlink.net

Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>

Subject: [121530] Re: Harbor Freight Hand Punch

Message-ID: <Springmail.105.1015537205.0.17023700@www.springmail.com>

Are these punches capable of punching holes in the front panels of metal cabinets for mounting knobs, jacks, meters, etc.?

73, Winston K4CWQ

k7qo@earthlink.net wrote:

>

Gang,

Aperiodically I get email referring to my web site and the Manhattan Style building pages. And the most asked question is what to do about the hand punch that was discontinued by Harbor Freight with the part number that I have there on the page.

On Wednesday I was in Phoenix and stopped at Harbor Freight to check out what they had that I needed or had my name on it. :-)

They have a hand punch Item Number 44060 that sells for under \$20 US currency. It is made in China and is the exact replacement for the hand punch that they had previously. The old hand punch was made in Taiwan and both have the same moment arms and require about the same pressure to punch pads out of PC board material or to punch pads out of brass sheet stock. The brass circles I use to silver solder to AA NiMH batteries that I get each year at Tuthill for \$1 each but do not have the button on the + end. Works great.

The punches are the same size and I made the mod of removing the point on the punch that holds the material in place while punching. I find that the point damages the pads on the opposite side and makes them convex in shape that I don't care for.

I will attempt to update the web page with this information some time soon but thought this information might be of use to those that are interested in trying Manhattan building. Especially if there is a building contest at Dayton this year.

I tried both the old punch and the new punch on some PC board material that comes with the NJQRP Manhattan board kit and I get the same excellent results. There any number of pages on the web now with ideas and schematics for building Manhattan Style.

FYI,

Chuck Adams, K7Q0 CP-60 k7qo@earthlink.net
<http://www.qsl.net/k7qo>

Moving to Arizona? --- Bring your own water, please.

Date: Thu, 07 Mar 2002 16:45:05 -0500
From: <winjones@ix.netcom.com>
To: randallr@Healthall.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [121531] Re: Ten Tec 505, 509, 515
Message-ID: <Springmail.105.1015537505.0.52980800@www.springmail.com>

The 515 is the best, in you can find one. They're a little rare. I have the 509 and it's great. It had several good improvements over the 505. However, the 515 has the extra 10 meter bandswitch, like the Triton IV, which provides even bandspacing over all the band. I do like the cream and brown case of the 505 and 509 over the black case of the 515. Also, you can get a 405 amp, which matches the 505 and 509.

73, Winston K4CWQ

randallr@Healthall.com wrote:

> Hello. I am looking to purchase one of these rigs and was wondering your opinion of them. Which of the three would be the better radio, most bang for the buck, and what were the differences between the models. I have heard about the PT0 rebuild problem.
Please reply off list.

Thank you,
Randy KB8AS0

p.s. If you have one you wuld like to sell, drop me a line off list.

Date: Thu, 7 Mar 2002 16:52:38 -0500
From: "Ed Tanton" <n4xy@earthlink.net>
To: <winjones@ix.netcom.com>,
 "'Low Power Amateur Radio Discussion'" <qrp-l@lehigh.edu>
Subject: [121532] RE: Harbor Freight Hand Punch
Message-ID: <009901c1c622\$66502280\$c39efea9@n4xy>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="us-ascii"
Content-Transfer-Encoding: 7bit

If you're talking about ordinary, thin aluminum, sure. Rack panel-thick?
Not a chance. Also note that there is some maximum distance a hole can be from the panel's edge... so a hole in the center of a 12 inch by 12 inch panel would have to be drilled.

THE two best uses for this punch are: 1) making little pc board material pads; and 2) making holes in solid/pure/whatever copper (et al) sub-panels. Copper is so soft/nasty to try and drill, punching REALLY helps with this. Even aluminum can get ugly and hang/twist when trying to drill small pieces.

73 Ed Tanton N4XY <n4xy@arrl.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

snip///

Are these punches capable of punching holes in the front panels of metal cabinets for mounting knobs, jacks, meters, etc.? 73, Winston K4CWQ

///snip

Date: Thu, 7 Mar 2002 13:56:02 -0800
From: Mark Schoonover <schoon@amgt.com>
To: "'winjones@ix.netcom.com'" <winjones@ix.netcom.com>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [121533] RE: Harbor Freight Hand Punch
Message-ID: <BF889CEBEFD2D511B993009027F60ABE1554B5@AG-JASMINE-NT4>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Sure, you'll just have to stay within the max thickness of the metal or gauge. I use mine to do just what you want to do. Much easier and makes a nicer looking hole than a drill.

.mark

--{ Mark E Schoonover KA6WKE
--{ Senior Hacker, IS Gopher, Hardware Fiend
--{ American Geotechnical
--{ <http://www.qsl.net/ka6wke>
--{ ka6wke@amsat.org

```
/"\  
\ /  ASCII Ribbon Campaign  
X    Against HTML Mail  
/ \
```

Date: Thu, 7 Mar 2002 16:10:35 -0600
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: <WCARC@yahoogroups.com>, <AQRP@yahoogroups.com>, <qrp-1@Lehigh.EDU>,
Subject: [121534] Re: [WCARC] The Rogers /Dobbins ARL Folded Conical Helix Antenna paper now published. Revolution in small HF Antenna design!
Message-ID: <00f501c1c624\$e7db5d40\$4e100a0a@rohredt2000>

I have had some good questions and I will first refer all to the paper in the IEEE publication.

However, to summarize: the efficiency was measured using the accepted method for physically small antennas the H. A. Wheeler , Wheeler cap method. This is a cylinder that fits over the antenna, and you make S parameter measurements with and without the cap. It is a big aluminum can that confines the radiated field, and this reflects back on the S parameters.

Electrically small antennas have a kr less than or equal to 1.

The resonance by spiraling the wires is reduced 13 per cent lower than the resonance of a solid cone of the same dimensions. This first model was resonant at 111 MHz with 32 MHz bandwidth to the 3 dB points for 2.8 average SWR.

Min SWR was 1.3 over the bandwidth. This first model has a ht. of 24.1 cm, diam. over the wide cone opening of 36.8 cm, and r was 30.3 cm, the slant distance down the cone to the narrow end, where it is fed. (Remember, 2.54 cm is 1 inch, for us metrically challenged types.)

There were 16 fold wires and all attached to the wire ring at the top, evenly spaced. 18 ga. was used for all wires save the feed wire which was no. 12. Fold spacing was 6.35 mm.

I know this is kind of sketchy, but it starts you off with something to scale. Remember, later models which we built for 10M were smaller, than just scaling from this prototype.

The difference between vertical and horizontal patterns was computed by pattern functions in NEC 4.

Field strength measurements in an open field test site have confirmed the intense near field and the high current of this design.

Thanks for all the interest, other questions should really go to KM5DR, Bob Rogers.

73,

Stuart K5KVH

Date: Thu, 7 Mar 2002 17:13:03 -0500
From: "John J. McDonough" <wb8rcr@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Cc: <dave@redhotradio.com>
Subject: [121535] Re: Pc Boards Got em ! but No Knowledge
Message-ID: <010b01c1c625\$606361e0\$010044c0@chartermi.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Yeah, but I suspect you know a guy who can lay down a circuit and expect to have it work first time, too. Some of us take a dozen tries to get someone else's circuit to work, let alone something just designed!

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----

From: "Dave Fifield" <dave@redhotradio.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Thursday, March 07, 2002 11:36 AM
Subject: Re: Pc Boards Got em ! but No Knowledge

> I know one!
>
> 72, Dave, AD6A

>
> ----- Original Message -----
> From: "Bruce Muscolino" <w6toy@erols.com>
> Subject: Re: Pc Boards Got em ! but No Knowledge
>
>
> > How many designers do you know who would etch a PC card to
> > build a prototype?
>
>

Date: Thu, 7 Mar 2002 17:46:27 -0500
From: "carl seyersdahl" <carlseye@tampabay.rr.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [121536] pcbs
Message-ID: <000e01c1c629\$eaa7aa60\$29221c18@tampabay.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've had several replies on my question of pcb programs and I appreciate each and every one. I deleted one program which I couldn't get to work and downloaded another which was suggested, which I can't get to work either. (it's obvious to me I ain't to darn literate in that respect)!! what I think I need is a smarter (much smarter) person who understands this stuff to take pity on an old ham and help me with a problem. I need a board which has never been designed, to use in an amp I'm re-building!! I want to use relays because switch wafers are becoming HARD to find . anyone out there care to take on something like that???

carl / kz5ca

Date: Thu, 7 Mar 2002 14:58:09 -0800
From: "Trevor Jacobs" <fxtech@earthlink.net>
To: <carlseye@tampabay.rr.com>,
 "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [121537] Re: pcb programs
Message-ID: <001801c1c62b\$8de6efa0\$089fb2d1@tjacobs>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Carl and all,

Eagle is a very good PCB Program! Especially for free. I just used it to design the PCB's for my DDS signal generator/VFO. I sent the Gerber files to AP Ciruits last Friday and they got here on Tuesday. The boards came out great and worked corectly the first time! Until then I had been using Tango for DOS. Tango worked great and I had been using it since 1990, but it was getting harder and harder to do what I wanted. I decided to try Eagle, because their freeware version was not seriously restricted and could produce the boards that I wanted to create. Carl, I'd download a fresh copy, totally uninstall the old one and re-install it. Chances are, that when you copied over files, some of the critical components of the program got either left behind or corrupted. If you are serious about creating circuit boards, this is a great program. Paint will not create the files to go to the PCB house. Take care...

72/73's

Trev

KG6CYN

----- Original Message -----

From: carl seyersdahl <carlseye@tampabay.rr.com>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Sent: Thursday, March 07, 2002 11:31 AM

Subject: pcb programs

> I recently downloaded a program called Eagle and was trying to get it
> to
> work. after buying a new computer and having all my files transferred,
> the
> Eagle program no longer worked. I was trying to learn to make some
> small
> pcb's for radios and such. E-mails from the the cadsoft people
> attempted to
> tell me how to get it to go again as a freeware program but nothing
> worked
> so I have "uninstalled " the whole program!! does anyone know of a
> freeware
> program that works without me having to be a genius?? (i'm not quite
> that
> far yet..)
> carl / kz5ca
>
>
>

Date: Thu, 07 Mar 2002 17:58:29 -0500
From: Ken Newman <N2CQ@dandy.net>
To: EPA-QRP@yahoogroups.com, QRP-L@lehigh.edu, njqrp@njqrp.org,
n9avg@amsat.org, w3bg@arrl.net
Subject: [121538] [CONTEST] N2CQ QRP Contest Calendar Mar 3-31
Message-ID: <3.0.6.32.20020307175829.00945a00@mail.dandy.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

~~~~~  
N2CQ QRP CONTEST CALENDAR

March 7-31, 2002  
~~~~~

40 METER FOXHUNTS (Ends on March 12)

Fox Hunt - Thursdays - 9pm EST, 8PM CST, 7PM MST and 6PM PST.
Info: <http://www.cqc.org/fox>

Cub Fox Hunt - Tuesdays - 9pm EST, 8PM CST, 7PM MST and 6PM PST.
Info: <http://www.zianet.com/k5di/fox/>

Truffle Hunt - Tue & Thur - 30 min before Fox Hunt
Info: http://fpqrp.com/pig_hunt.html
~~~~~

Great Lakes QSO Party (Ph/CW/Digital) ... QRP Category

Mar 9 - 1500z to Mar 10 - 0500z

Rules: <http://www.geocities.com/mdxa1/qsoparty.html>

"Work as many Great Lakes States and Province"  
~~~~~

Second Class Operator's Club (SOC) Marathon Sprint (CW) .. QRP Contest!

Mar 9 - 1800z to 2400z

Rules: <http://listserv.lehigh.edu/lists/Archives/qrp-1/>

"QRP or QRPp Fun Sprint. QLF not required for club membership"

~~~~~  
UBA (Belgian) Spring Contest (CW-80m) ... QRP Category

Mar 10 - 0700z to 1100z

Rules: <http://www.uba.be/HF/conrules/spring.htm>

"North American Night Owl choice"

~~~~~  
Wisconsin QSO Party (CW/SSB)...QRP Category

Mar 10 - 1800z to Mar 11 - 0100z

Rules: <http://www.warac.org/wqp/wqp.htm>

"Work WI Counties. QRP improves your score."

~~~~~  
Pesky Texan Armadillo Chase (CW) ... QRP Contest!!

Mar 13 - 2000 CST to 2200 CST

Rules: <http://listserv.lehigh.edu/lists/Archives/qrp-1/>

"Chase the 20+ 'Dillos!"

~~~~~  
Somerset Homebrew Contest (CW/SSB - 80 Meters) ...QRP Contest!

Mar 16 - 0000z to 2400z (Any 4 hours)

Rules: <http://www.sk3bg.se/contest/somerset.htm>

"Homebrew and kits. Prizes available. Europeans operate 1900z-2300z"

~~~~~  
BARTG Spring HF RTTY Contest



Mar 16 - 0200z to Mar 18 - 0200z

Rules: [http://www.bartg.demon.co.uk/Contests/02\\_rules.htm](http://www.bartg.demon.co.uk/Contests/02_rules.htm)

"Much RTTY DX"

~~~~~  
Russian DX Contest (CW/SSB)

Mar 16 - 1200z to Mar 17 - 1200z

Rules: <http://www.rdxo.org/rules.html>

"Work anyone but lots of points for Russians"

~~~~~  
Virginia QSO Party (CW/SSB) ... QRP Category

Mar 16 - 1800z to Mar 18 - 0200z

Rules: <http://www.qsl.net/sterling/QSOParty.html>

"Excellent state QP and nice awards too."

~~~~~  
Montana QSO Party (CW/PH/DIGITAL)

Mar 16 - 2300z to Mar 17 - 2300z

Rules: <http://www.arrl.org/contests/months/mar.html>

"Work 56 MT counties"

~~~~~  
Oklahoma QSO Party (CW/Digital/Phone) ... QRP Category

Mar 22 - 2300z to Mar 24 2300z

Rules: <http://www.qsl.net/okdxa/OKQP.htm>

"Work OK Counties. Awards. S/W available"

~~~~~

Spring QRP Homebrewer Sprint (CW/PSK31) ... QRP Contest!!!!

Mar 25 - 0000z to 0400z (Sunday evening in US/Canada)

Rules: <http://www.njqrp.org/data/qrphomebrewersprint.html>

"Test your Homebrewed equipment. All can join. Prizes!"

~~~~~

CQ World-Wide WPX Contest (SSB) ... QRP Category

Mar 30 - 0000z to Mar 31 - 2400z

Rules: <http://home.woh.rr.com/wpx/>

"More fine SSB DX. Compete with other QRPers."

~~~~~

Thanks to WA7BNM, SM3CER, ARRL and others
for assistance in compiling this calendar.

Anyone may use this "QRP Contest Calendar" for your website, newsletter,
e-mail list or other media as you choose.

(Include a credit to the source of this material of course.)

72 de	**** N2CQ QRP Contest Calendar ****
Ken Newman - N2CQ	http://www.njqrp.org/data/contesting.html
N2CQ@ARRL.NET	http://www.n3epa.org/Pages/Contest/contest.htm
	http://www.qsl.net/cqrp/contests.html

Date: Thu, 07 Mar 2002 18:01:23 +0000
From: Gary Lee <kb9zuv@arrl.net>
To: qrp-1@lehigh.edu
Subject: [121539] qrp freqs needed
Message-ID: <3.0.6.32.20020307180123.007c2ea0@mailhost.ind.ameritech.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have seen lists of freqs before, and have the arrl band plan. However, I
have heard both 7040 and 7060 as the 40 meter qrp freq. Which is it?

Also is there a better list than the arrrl band plan?

Thanks.

Gary Lee
kb9zuv

Date: Thu, 7 Mar 2002 18:17:06 -0500
From: John R Kirby <n3aaz-qrp@juno.com>
To: jdorson@Worldshare.net, qrp-1@Lehigh.EDU
Subject: [121540] Subject: portable vertical antenna
Message-ID: <20020307.181712.-238803.0.n3aaz-qrp@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

>>Not sure where to start on building the coil portion.
There is a picture of my >L< (the inductor) on the
QRPP International Radio Club's Web site:
<http://www.QRPP-I.com>

>>operate 30 and 20 meters.

>>I am looking to build a portable vertical antenna using a base loaded
coil

Check out the >SHORT< version below for vertical antenna . . .

The all band portable antenna 'stuff' (below) is my (N3AAZ) work,
it was published in the Nor-Cal QRPP newsletter
(a few issues back), see . . .

THE >L< NETWORK REVISITED
for the schematic and figures or
e-mail me for a .gif attachment.

An old five tube radio can provide the 355uF variable >C<
. . . OR . . . because the >L< has taps (it is variable)
just *parallel* >C< to almost any variable capacitor.

A tuning indicator is required, the GQRP web site has an
outstanding bridge type (again . . . simple AND it WORKS)
plans to build from scratch.

73, John (N3AAZ)

>>>>>> START QRPp TEXT >>>>>>>

THE >L< NETWORK REVISITED

What do these terms have in common?

QRP, backpacking, efficiency, zero-weight feedline, low pass filter, stealth, home brew, omni-directional, all band, tuner, and . . .

Answer . . . One inductor and one capacitor, the >L< Network

Figure 1 (e-mail me direct for an attachment "EXPORT -L- . gif") shows the no feedline, portable, long wire antenna system I used with outstanding success a few years ago while camping in a pop-up. This setup will match most 100 foot long wire antenna configurations from 80 through 10 meters. Since the components are small, light, easy to pack and deploy this configuration also makes for an outstanding spare or emergency antenna.

The inductor is 21 turns of solid 18 AWG wound on a "stack" of three, Micrometals, RED (MIX 2), T94-2, powdered iron cores, with a "tap" placed every three turns (Figure 3). The capacitor is a 200 pico Farad variable. The antenna wire is a small roll of inexpensive, insulated, zip cord. You will need "alligator" clips and a tuning indicator. The earth ground system is several strands of zip cord in parallel. The ground rod just a common screwdriver with a vice-grip for hammer and wire clamp.

Feedline is not required (see Figure 1) because the >L< network is connected direct between transceiver and base (the feed point) of the antenna. The feedpoint of the long wire antenna is located inside the shack (camper, tent or sleeping bag).

The tuning indicator can take many forms. It is noteworthy to say, if it takes too long to adjust ANY antenna tuner, the "final RF amplifier" in your transmitter may be at risk to over heating. I suggest, install a 10 dB attenuator (figure 4) between the transmitter and tuner to help protect the PA transistor during the initial adjustment. The "attenuator" technique is NOT a guarantee. The safest method is reduced transmitter power and short (intermittent) "key down" adjustments. The attenuator is removed for final adjustment and QSOs.

The >L< Network

For the purpose of this discussion the term long wire antenna refers to a non resonant wire element that is either, straight line, zigzag,

horizontal, vertical, or any combination, but always longer than a half wave at it's operating frequency. A counterpoise is not required. An earth ground helps.

The approximate half wave length in feet can be determined by dividing 468 by the operating frequency in MHz. Example, $\text{Length(ft)} = 468 / F(\text{MHz})$, a half wave at 7.04 MHz is approximately 66.5 feet.

How does the >L< network match a low impedance transmitter to high impedance long wire? Connect the coil in series between the XCVR / ANT junction and connect the capacitor from the COIL / ANT junction to the XCVR chassis and earth ground, see figure 1.

The >L< network will also match most random, non resonant, "short", low impedance antenna. The short antenna refers to a wire or rod (whip), straight line, zigzag, vertical, horizontal or any combination but always less than a quarter wave at it's operating frequency. The short antenna is a compromise, efficiency can be poor and a counterpoise is required for best results. When matching a highZ (50 Ohm, transmitter) to lowZ (15 Ohm, short vertical) the inductor is connected in series between source and load. The capacitor is "shunt" or parallel to the source, see figure 2. Note, this connection is unlike the "long" example above.

Today our camper is a fifth-wheel with an eight-foot aluminum ladder rack. I just add a Radio Shack # 21-937B Rack Mount Bracket to create a very nice whip antenna support AND ladder rack counterpoise antenna system. The base of my antenna is now atop that ladder rack so a feedline is required. NOTE . . . Feedline may assert a length problem and affect the impedance the transmitter looks into when there is a reactive component on the other end. Why? In this case, the load (on the feedline) is a non-resonant length of wire, i.e., a reactive component. Therefore, the transmitter in Figure 2 will only see 50 Ohms when there is a half wave, 50 Ohm feedline connected. Why? A half wave feedline "repeats" at it's INPUT what it "sees" at it's OUTPUT and the >L< network for the "short" antenna was designed to match 50 Ohm.

Conclusions . . .

Exclude . . . the feedline and it is noteworthy to say, the >L< network shown in figures 1 and 2 match the Smith Chart ' yin / yang ' curves, i.e., there is most likely no point on the chart one or the other network configuration will not match to 50 Ohm.

Include. . . a feedline of random length and the >L< network may not tune all the bands, however, the operative word is "random" length feed line. Change the feed line length a foot or two and try again.

Ah 'little Theory and Math (very little). . .

The impedance presented by the end of a random wire can range over a very large playing field, from only a few Ohms to several thousand Ohms. This calculation shows just one example, how to match a 50 Ohm source to a 377 Ohm load using the >L< network.

First find K

$K = \text{Square root of } ((\text{HighZ} / \text{LowZ}) - 1)$

$K = ((377 / 50) - 1)^{0.5}$

$K = 2.56$

Next find X(L), reactance of the matching coil

$X(L) = K \text{ times LowZ}$

$X(L) = 2.56 \times 50$

$X(L) = 128 \text{ Ohm}$

Next find the matching coil value

If $X(L) = 2 \text{ Pi } F L$

then $L = X(L) / 2 \text{ Pi } F$

$L = 128 / (6.28 \times 7.04\text{E}6) \gg 7.040 \text{ MHz} \ll$

$L = 2.89\text{E}-6 \text{ or } (2.89 \text{ uH})$

The series inductor should be approximately 3 micro Henry

Next find X(C), reactance of the matching capacitor

$X(C) = \text{HighZ} / K$

$X(C) = 377 / 2.56$

$X(C) = 147.26 \text{ Ohm}$

Next find the matching capacitor value

if $X(C) = 1 / (2 \text{ Pi } F C)$

then $C = 1 / (2 \text{ Pi } F X(C))$

$C = 1 / (6.28 \times 7.04\text{E}6 \times 147)$

$C = 1.5\text{E}-10$

$(1.5\text{E}-10)$ is 0.15 nano Farad or 0.00015 micro F or 150 pico F

For a lower SWR : >) make C a variable capacitor and (if required) parallel fixed value capacitors to extend the range or series fixed values to decrease the range (total value).

Thank You . . .

This article is the result of my response to a thread on qrp-l. Ade, W0RSP wrote in part . . . "If you really are worried about the weight of a feedline, why use one at all? Instead put up an end fed antenna coupled to a tuner". Doug, KI6DS, read my solution to the feedline weight problem and ask to publish my humble input. This is indeed an

honor, thank you Doug, for the invitation and privilege to publish in QRPp. Special thanks go to Bill, KD7S and L.B., W4RNL, for their patient guidance and knowledgeable assistance.

I welcome all comment, >>n3aaz-qrp@juno.com<<

John, N3AAZ

<<< END TEXT <<<

enjoy . . .

73,

John
N3AAZ
FM 19 xa

GET INTERNET ACCESS FROM JUNO!
Juno offers FREE or PREMIUM Internet access for less!
Join Juno today! For your FREE software, visit:
<http://dl.www.juno.com/get/web/>.

Date: Thu, 7 Mar 2002 18:23:12 -0500
From: "N8IE" <n8ie@woh.rr.com>
To: "QRP-1" <qrp-1@lehigh.edu>, "FPQRP-1" <fpqrp-1@mpna.com>
Subject: [121541] SCORE!!
Message-ID: <MMEDLKDLONJOAIGICDJAGEGBCJAA.n8ie@woh.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

7X4AN, Mohamed in Algeria. Worked him 5 watts SSB on 21.275.

72, oo
Dan, N8IE
FPqrp #-6, QRP-1 #1404, FISTS #4985

Date: Thu, 7 Mar 2002 18:37:47 +0000

From: ve3ab@mail.mondenet.com
To: qrp-1@Lehigh.edu
Subject: [121542] Re: QRP+ version number//QRP+ Experimentation.
Message-ID: <200203072345.g27Njlb01303@genesis.dmz.mondenet.com>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

I have a QRP+, 1255 nr on bottom cover. I think its original. Im curious about the differences in performance and any factory upgrades.

Im going to add some protection to the SBL-1 front end rcv mixer. Mine got damaged 2 field days ago..must have been static electricity on antenna. I actually cut the old mixer out (left the original old pins and bottom of case intact..and piggy backed a new mixer on top..Now the rig works again. Was -50 db on rcv and low tx b4.

Needs the back to back (4 diodes) to protect it and maybe a neon bulb lamp across the antenna or perhaps a VARISTOR? any ideas? Strong adjacent signals can cause some problems..ie W1AW on 80 mtrs here is vy strong and causes some blocking and spurs.

>> I have a mixer from a spectrum analyser..in fact i have 2 of them. I was thinking of trying them or perhaps a higher quality of mixer than the SBL-1..I would welcome suggestions. The reciever is simple..but when you have a good quiet band..ie 10 meters..it would be nice to have a little more gain on rcv..ie serious weak sig work! My planned mod..is non destructive and reversible. It would add a good low noise preamp with relay to switch in and use existing NORM and -20db front panel switch. NORM would then be norm..and -20 db would be preamp added instead of atten...let me know any interesting ideas.....73 Earl VE3AB

Date: Thu, 07 Mar 2002 18:50:14 -0500
From: Dave Richards <wr3i@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>, jhisson1@columbus.rr.com
Subject: [121543] Re: Dipoles, Windoms, Loops, oh my!
Message-ID: <A7S0FAHFUPTR4ZTPGIDTNZU96UP9784.3c87fcb6@sony>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"

Jason,

are you looking for muliband or single freq. antenna? with dimensions you give a forty meter loop (Rectangle)would provide a very noticable difference even at the low

height of 40'

rgds

Dave

W1QB

/7/2002 9:03:28 AM, "Jason Hissong" <jhisson1@columbus.rr.com> wrote:

>Hi guys,

>

>Spring is coming and I have been contemplating upgrading/replacing the Alpha
>Delta DXLB+. The candidates are a Carolina Windom 40 (yea, the one the
>broke the record), the Super Loop 40, or building a Skyloop. Question is,
>which is better? I have heard that the Superloop (or loops in general) are
>less noisy than dipoles. I have also heard that the Windom does great as a
>DX antenna. Comments? I cannot put a tower up (not because of CCR's, my
>town is very nice about towers, but because of \$\$\$\$\$). Will I notice any
>difference between the dipole I have now, and one of the antennas mentioned
>above? I have about 70' between two trees to play with and about 55'
>between a mast that I installed (about 6 feet) and one of the trees. The
>antenna will be installed about 40 feet. The DXLB+ is a trapped dipole.

>

>Thanks es 73

>Jason

>

>N8XE

>K2 #1270 looking for a new antenna

>

>

Date: Thu, 07 Mar 2002 18:56:49 -0500

From: Dave Richards <wr3i@earthlink.net>

To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>,
jhisson1@columbus.rr.com

Subject: [121544] Re: Dipoles, Windoms, Loops, oh my!

Message-ID: <UOKE0NHC96GFDUSZT539852THDZ.3c87fe41@sony>

MIME-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"

OH! and By the way What town are you in? I might want to move there :-)

Dave

3/7/2002 9:03:28 AM, "Jason Hissong" <jhisson1@columbus.rr.com> wrote:

>Hi guys,
>
>Spring is coming and I have been contemplating upgrading/replacing the Alpha
>Delta DXLB+. The candidates are a Carolina Windom 40 (yea, the one the
>broke the record), the Super Loop 40, or building a Skyloop. Question is,
>which is better? I have heard that the Superloop (or loops in general) are
>less noisy than dipoles. I have also heard that the Windom does great as a
>DX antenna. Comments? I cannot put a tower up (not because of CCR's, my
>town is very nice about towers, but because of \$\$\$\$). Will I notice any
>difference between the dipole I have now, and one of the antennas mentioned
>above? I have about 70' between two trees to play with and about 55'
>between a mast that I installed (about 6 feet) and one of the trees. The
>antenna will be installed about 40 feet. The DXLB+ is a trapped dipole.
>
>Thanks es 73
>Jason
>
>N8XE
>K2 #1270 looking for a new antenna
>
>

Date: Thu, 07 Mar 2002 18:57:50 -0500
From: Fred Lesnick <flesnick@tbaytel.net>
To: QRPL <qrp-l@Lehigh.EDU>
Subject: [121545] 7X4AN on 5 watts
Message-ID: <3C87FE7E.2CAC2FBA@tbaytel.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I too just worked Mohamed on 21.275 on SSB. Then we went to c.w and
worked him. A new country for me running QRP.
Not bad for 5 watts on SSB a 5-5. And on cw at 5 watts I got a 569.

73
Fred
VE3FAL

End of QRP-L Digest 2487
